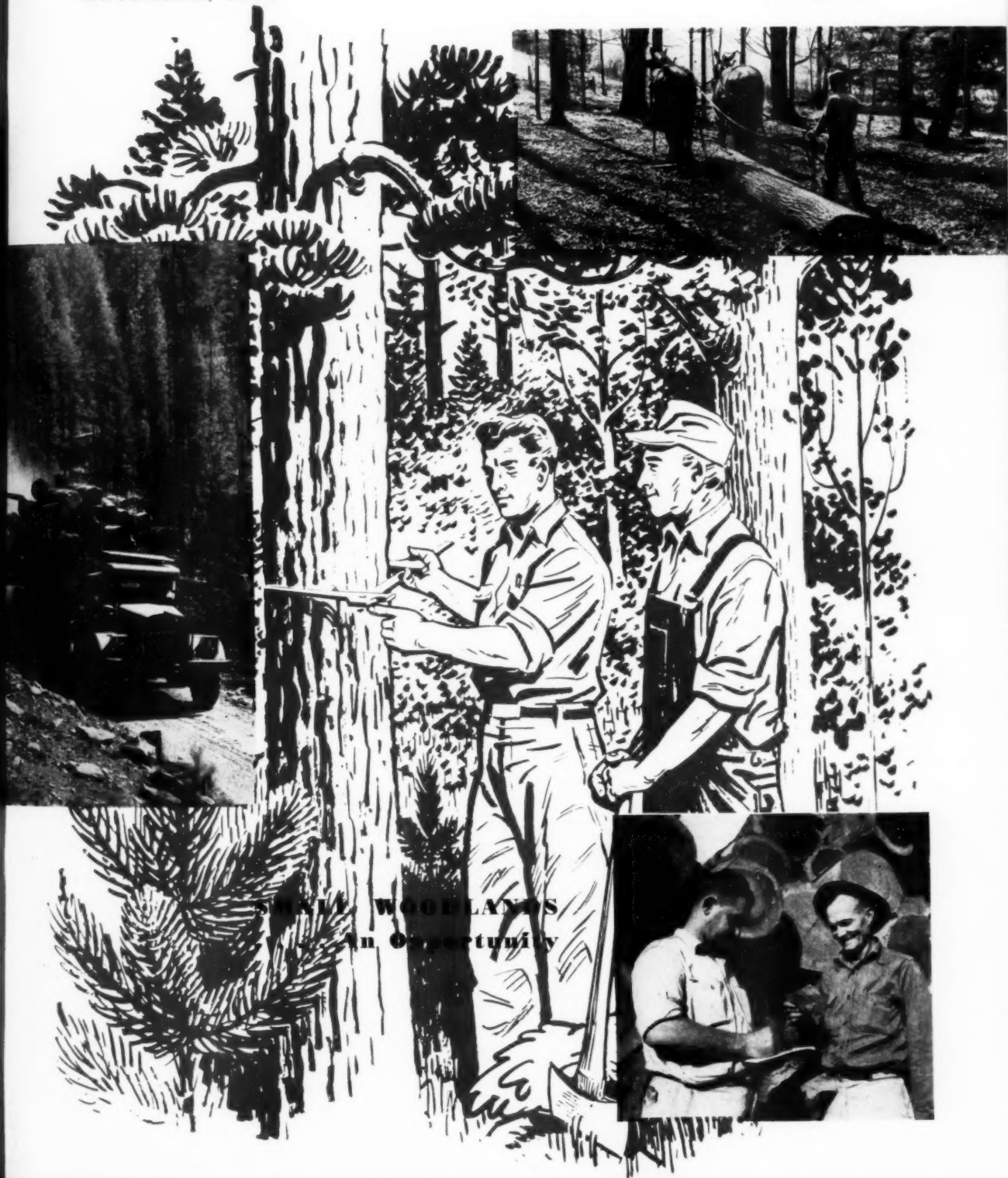


American FORESTS

NOVEMBER, 1956

50 CENTS



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James B. Craig

Editor

Betty Fadeley

Assistant Editor

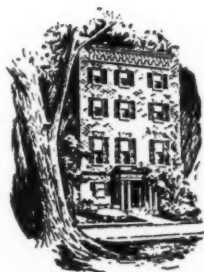
James J. Fisher

Art Director

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The AFA

The American Forestry Association, publishers of *American Forests*, is a national organization—independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

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Forest Forum

Landownership Survey

EDITOR:

In your article, "Landownership Survey," in September AMERICAN FORESTS, by Carl Shoemaker you name the largest of the "federal agencies (that) own large blocks of California acreage." You then say: "All of this public land is no longer subject to taxation." The obvious implication of these words, you must agree, is that this public land *was* once subject to taxation and that, you must further agree, is not at all the fact. The overwhelming bulk of these lands to which you refer either are or were a part of the public domain and have never been subject to taxation.

The implication of your words is the more unfortunate since, while taxes are not and never have been paid on most of these lands, their presence in California brings to the state many millions of dollars in lieu of taxation and expenditures by Uncle Sam in recognition of his obligations as a proprietor. On the national forests for 1950-56 the sum of: 1) the 25 percent of receipts paid to the state for county schools and roads, 2) the 10 percent of receipts spent for national forests roads and trails, 3) forest highway expenditures, 4) a portion of federal expenditures for national forest fire suppression at a per acre rate equal to what the state and counties spent on lands under their protection, totals about 90 million dollars. This does not include substantial additional direct expenditures by the Forest Service for all activities other than fire and roads and for the remainder of those two items not included above.

Judge Robert Sawyer
Bend, Oregon

EDITOR:

In your September issue you printed a report, written by the undersigned, on the first meeting of The American Forestry Association's Committee on Forest Landownership held in San Francisco last July.

One statement in my report has been called to my attention by Judge Robert Sawyer, of Bend, Oregon, a warm friend for more than 40 years. He says that the sentence in the first paragraph of the second column on page 6 which reads that "All of this public land is no longer subject to taxation" is erroneous. He refers to the previous two sentences in which I state that "many federal agencies own large blocks of California acreage" and that "the largest of these are the Forest Service, the Department of Defense, Bureaus of Indian Affairs, Land Management and Reclamation, the Fish and Wildlife Service and the National Park Service."

He is absolutely correct and justified in his criticism. The sentence in question should have read "None of this public land is subject to taxation."

Unwittingly, I failed to report that some

of this land had been acquired from private owners by the federal government *through purchase*. And, of course, when title to these lands has passed from the private owner to the government, it no longer is subject to taxation.

In a report of the Committee on Interior and Insular Affairs of the Lower House of Congress on federal landownership issued in 1954, it is shown that "in California, between 1939 and 1952, the federal government acquired 2,114,516 acres of land, primarily for military purposes. It has an estimated assessed valuation of \$73,051,269. The improvements thereon have an estimated assessed value of \$244,921,255." It is further stated that "the estimated yearly property tax loss to local government in California alone on federal property acquired since 1939 is \$16,927,107."

We must recognize, however, that there is a return to the counties through contributions in lieu of taxes. Twenty-five percent of the gross receipts from national forests and 25% of the net receipts from wildlife refuges are so contributed. In reference to the BLM, formulas vary; but here too a substantial sum is returned to the counties. Twelve and one-half percent of grazing receipts are likewise turned over to the counties in which they arise. Another 10 percent of forest receipts are used for road and trail construction. There are other well-known contributions or "kick backs" which lighten the load of the local taxpayer. In some instances they amount to more than would be received if these lands were in private ownership and subject to taxation.

This matter of federal landownership and its freedom from taxation has perplexed Congress after Congress for many sessions. It is not going to be quickly resolved. There are many citizens who hold that these public lands are their heritage, and that they will fight to retain them as such.

Personally and as a member of your Committee on Forest Landownership, I regret that I left a wrong impression in my report and trust that this explanation will clear it up.

Carl D. Shoemaker
232 Carroll St., N.W.
Washington 12, D. C.

EDITOR:

The American Forestry Association's current study on forest landownership is an intelligently conceived project continuing the best traditions of our association. A more capable Committee on Forest Landownership than that selected to conduct the study would be difficult to find. Unfortunately Mr. Shoemaker's article, "Landownership Committee," in the September issue of AMERICAN FORESTS, contains clichés, long the weapons of those who oppose public forestry or who have not fully understood it. Some of us fear our newer readers

will be misled by incongruous statements printed.

The author states, "Many federal agencies own large blocks of California acreage," whereas some of us firmly believe that the people own such blocks and that the federal agencies only administer them for us.

In the same paragraph Mr. Shoemaker states that this public land is no longer subject to taxation and that "The loss in revenue for taxation purposes is stupendous. . . ." This will appall many who do not immediately recall that the Forest Service recognized this situation as early as 1908, and that it, the Fish and Wildlife Service, the Bureau of Land Management, and many state agencies make payments to local governments in lieu of taxes.

Then in the paragraph on tourists and need for more camping places, he includes a quotation by a Californian purporting that more land is needed ". . . for more people. The only way to get it is from the federal government." And yet in all of the western states the federal public lands are among the most readily available for campers, hunters, and fishermen, and extend the tradition that the United States in addition to their wonderful privileges of private ownership, always have enjoyed extensive areas of public wildlands on which to adventure.

These comments may seem a bit hairsplitting; but heads have been, and will be, split over less obvious aspects of landownership.

J. V. K. Wagar, Head
Forest Recreation and
Wildlife Conservation Dept.
Colorado Agricultural and
Mechanical College
Fort Collins, Colorado

Wilderness Bill

EDITOR:

The resolution of The American Forestry Association and subsequent editorials in your magazine concerning S. 4013, the National Wilderness Preservation Bill, have come to my attention. I am at a loss to reconcile your position opposing this bill with the reasons stated.

We both agree that the basic wilderness system now exists as a result of executive action over the years. Apparently the AFA then takes the position that the creation, change, or abolition of these areas is sound if the executive agencies perform the job; but that such action becomes bad if Congress establishes a policy and program.

Your editorial claims that "it is not possible to foresee all the changing conditions and requirements of the public interest from generation to generation . . ." and you go on to claim that the result of my bill "could well be crippling of a service whose previous flexibility to

meet new needs as they arise enabled it to set up a system of wilderness areas in the first place."

I must admit considerable difficulty in understanding precisely what it is you really object to in S. 4013. This bill provides the maximum in real flexibility, and at the same time provides protection for vital wilderness values as well as other economic values. The bill itemizes each area presently considered to have special wilderness significance, and it provides for a ten-year period during which a review and re-examination of future values can be made. S. 4013 not only sets up procedures for reduction or abolition of wilderness areas, but it also provides the same sound criteria for any extension of the wilderness system. It never closes the door on change.

My own views on the desirability of this bill were strengthened by a discussion I had with Senator Morse, one of the co-sponsors. One of the reasons for his giving the bill his warm support was that it provided sound procedural machinery for promoting and achieving necessary changes by democratic processes.

As AMERICAN FORESTS readers should know, reductions are currently being considered for the Three Sisters Wilderness Area in Oregon. As economic pressures in local areas impinge upon other areas, other changes will be requested. Our limited wilderness areas are of national interest and we must consider the policy on a national basis. In the present dearth of Administration leadership, the responsibility clearly falls upon the Congress to set the guidelines through hearings, debate and legislation.

Hubert H. Humphrey
United States Senator
Minnesota

(Editor's Note—The comments of Senator Humphrey and other proponents of the Wilderness Bill were carefully examined by our Board of Directors at a recent meeting. The Board's view on this legislation remains unchanged. It comes back to its original question, "Why is this legislation necessary?" On national forests, the career Forest Service professional has administered these lands—including the wilderness areas he created—both intelligently and well. He does this under multiple use in which we believe as opposed to the locking up or setting aside of specific areas for specific purposes by Congressional action in which we do not believe. Success of this program has been due to the elasticity of a management pattern as set up and maintained under the Executive Branch. Strong Secretaries of Agriculture, both Democratic and Republican, have upheld this program, mindful of the trust the American people repose in the Forest Service. Certainly there will be boundary adjustments and sometimes professional decisions will favor one group, sometimes another. The important thing is that those decisions will be based on professional criteria and facts by dedicated men who believe in the "greatest good for the greatest number . . ." Who could do the job better?)

EDITOR:

I have been closely associated with The American Forestry Association for many years and have been in full sympathy with its fine work and objectives. I try to be as fair in my appraisal as is humanly possible, but the recent expressions

(Turn to page 64)

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This delegation from Scott County, Mississippi, and similar groups are expected to form county forest fire prevention organizations as a result of the statewide conference held in Jackson, Mississippi

SPARKS FROM GLOWING EMBERS

SPARKS from the glowing embers of the Southwide Forest Fire Prevention Conference continue to ignite new efforts to curb the menace of forest fires. The first result of the Southwide conference was a statewide meeting in Birmingham, Alabama. The 2300 attending this meeting in turn are following with meetings in each county as

By **KENNETH B. POMEROY**

they seek to carry out their campaign of fire prevention in every community.

A similar meeting was held in Jackson, Mississippi, on September 14, when 700 citizens of 53 counties heard Governor J. P. Coleman urge

that the remaining 17 Mississippi counties be brought under organized fire protection. "We are beginning a new day in Mississippi," Coleman said. "In the years ahead we can take advantage of opportunities that are at hand."

Governor Coleman pointed out that every 80 acres of fully-stocked, well managed timberland provide full-time employment for one man. On this basis, full use of Mississippi's present forested area could provide 610,000 new jobs for citizens of the state.

Governor Coleman was followed by Dr. J. V. Duckworth, Sheriff of Lauderdale County, who stressed the need for educating the leaders of thought in each community. When these leaders tell their friends what they have seen, then the friends believe it, because they are hearing it from the home folks—folks they know and trust.

Mrs. Burnette Y. Hennington, past president of the State Federation of Business and Professional Women's Clubs, pointed out that women own approximately 60% of Mississippi's timberland; and they are just beginning to find out how important these lands are to the

(Continued on page 44)

MAN PASSES BY

*God shield the trees lest they in all their beauty turned
To twisted blackened embers burned
So towering oaks and beach and pine
Will rear their heads 'neath blue sky-line
To let us know that all is good.
Don't let mankind leave blackened wood.
God guide the helpless frightened things
To safety ere a frightful death it brings
Please help them when a careless hand
Lays desolate and bare the land
To help them live; we call on High.
They cannot pray, they can but die
To help them heed, to Thee we pray
When careless mankind pass their way.*

Mrs. M. B. Hughes
Marked Tree, Arkansas

he holds
the future
in his hand...

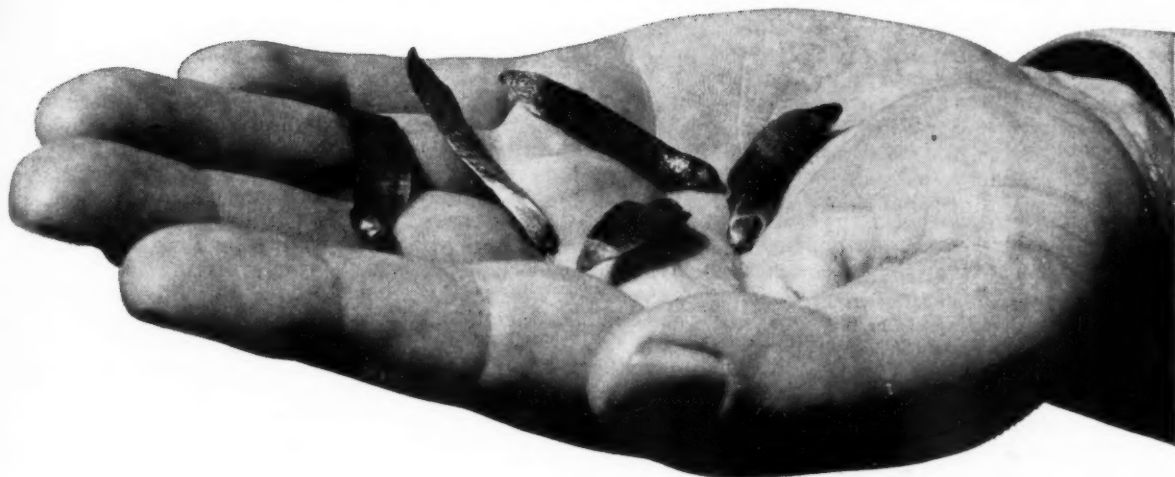
He is the small landowner.

He and the tree seeds in his hand are the keys to the nation's forest production.

In the South he supplies the pulp and paper industry with about 75 per cent of its raw materials. With the rapid expansion of its pulpwood needs, the industry will be looking to him for an even greater volume in the years to come.

On his ability to supply these needs will depend much of the industry's future planning and growth.

Reports indicate that 34 per cent of his land is being cut wisely. By employing practical forest management measures on an ever wider scale,



he is making progress towards maximum, long-term income from his wooded area.

He is becoming a tree farmer.

Tree farming aims at maximum growth rates, adequate protection, and sound cutting and marketing practices, which require application of simple rules of forestry.

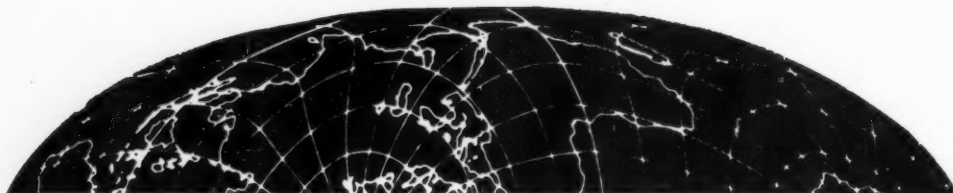
These are readily available to the small landowner.

We feel that by stimulating and encouraging a free exchange of forest management know-how and experience, more rapid progress can be made, and that eventually he, the small landowner, will become one of the bulwarks—and chief beneficiaries—of the South's forest economy.

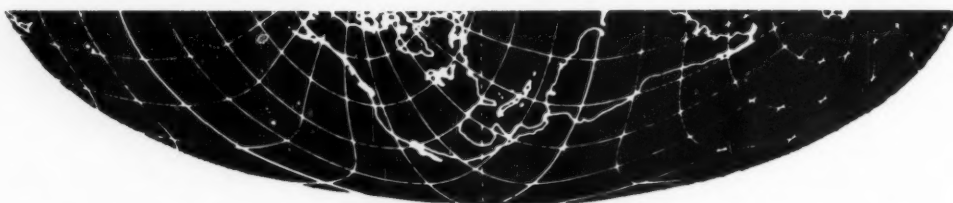


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THE FIFTH WORLD FORESTRY CONGRESS



... Should the United States be Host?

THE Fifth World Forestry Congress will be held in 1960. But the question of which nation will be host to the next Congress has not yet been decided. Should the United States offer to be host?

There is growing interest in the United States in favor of having the next World Forestry Congress in this country as evidenced by the action taken by the Western Forestry and Conservation Association at its annual meeting on December 8, 1955. It stated in a resolution:

"... the Western Forestry and Conservation Association believes the United States of America is eminently qualified as a site and that the logical place to hold such a Congress is in the Pacific North-

By V. L. HARPER

west, where unexcelled examples of forest management under a wide variety of forest conditions are readily available for visiting."

It also established a "Provisional Committee" to consult with the State Department and other interested agencies in regard to the United States extending an invitation to be host.

What is a World Forestry Congress and where have they been held to date? Why should we be interested in having the next Congress in the United States? What are the steps that must be taken in seeking and planning a World Forestry Congress? These are questions about which many agencies and individuals interested in forestry matters will be thinking in the next few weeks, if indeed they have not already begun.

The first World Forestry Congress was held in Rome in 1926. The second was held in Budapest in 1936. The third was in Helsinki in 1949, and the fourth in Dehra Dun, India, in 1954. So far, three Congresses have been in Europe and one in Asia.

The first two Congresses were held under the auspices of the International Institute of Agriculture, whose Sixth Annual Assembly in 1922 had voted to invite all nations to a conference to consider world forestry problems. The second two Congresses were held under the auspices of the Food and Agriculture

Organization of the United Nations (FAO), the world agency that took over the functions of the now extinct International Institute of Agriculture.

The Congresses have no continuing status and depend largely upon a sponsoring body, such as FAO, for their initiation. The organization and cost of a Congress, however, are the responsibilities of the host country.

The Congresses have grown in size and scope over the years. At the third there were participants from twenty-seven countries; at the fourth, forty-seven countries participated. The number of persons attending recent Congresses has ranged between four and five hundred. Participants from the United States have attended all past meetings.

The purpose of a World Forestry Congress, which is non-governmental in nature, is to provide a medium for the exchange of information and personal views of participants. The subjects programmed for discussion have been varied, reflecting changing emphasis on the numerous technical aspects of forest production and forest-products utilization. The proceedings of the Congresses and the summaries and recommendations which the participants have jointly framed and agreed to have provided a useful source of information to many agencies and individuals. Also, it is noteworthy that the recommendations of the last two Congresses have had a considerable influence on the orientation of

(Continued on page 54)

AFA Votes "Yes"

Do you want the 1960 World Forestry Congress in the United States? "Yes" voted the Board of Directors of The American Forestry Association last month at La Plata, Maryland. We have much of which we are proud that we would like to show some 200 foreign foresters who would attend the event. We, in turn, could learn much from them. The result could be "encouragement of better understanding internationally and closer cooperation," the Board said.

Board Member Stanley G. Fontanna and Corydon Wagner, of the St. Paul and Tacoma Lumber Company, represented AFA at the last Congress in India. Prominent public foresters slated to attend were "grounded" at the last minute by the State Department.

Washington



Lookout

By ALBERT G. HALL

CONSERVATION HAS NEVER LOOMED LARGE IN A NATIONAL POLITICAL CAMPAIGN, but the 1956 Presidential campaign provided an exception. On a state basis, the 1952 Senatorial elections saw the rise of a group in Oregon known as "Conservationists for Neuberger." To what extent this group influenced the election of Senator Richard Neuberger will probably never be measured, nor measurable. Late in the 1956 campaign, a somewhat similar group came forward known as "Conservationists for Stevenson-Kefauver." Again, the effect of the group is undetermined. But it is significant in the national political scene that a group, whatever the merits of its accusations against the present administration, has felt that its approach to conservation is important enough to warrant being singled out among the many possible issues of the campaign. Foresters identified with the group include Shirley W. Allen, retired professor of forestry and now a member of the Michigan State Conservation Commission; C. Edward Behre, retired, U. S. Forest Service; Earle H. Clapp, retired former acting chief of the U. S. Forest Service; Clarence L. Forsling, formerly with the Forest Service and with the Department of the Interior; and Lyle F. Watts, former chief of the Forest Service. As foresters, these men do not necessarily represent the political beliefs of the profession, nor of the agencies with whom they were formerly associated. In this political action, they represent only themselves. They may, however, have helped launch conservation as a political issue in future national elections. In fact, shortly after the formation of this first political action group, supporters of the administration were giving serious thought to the desirability of forming a counter group.

THE POLITICAL POTENTIAL OF CONSERVATIONISTS is indicated by the millions of persons who take their recreation in the outdoors. Sportsmen—that is hunters and fishermen—number 25 million, according to a study recently completed for the U. S. Fish and Wildlife Service. While this group is not necessarily composed entirely of conservationists, they doubtless favor any movement, governmental or private, that will assure them of areas in which to pursue their chosen recreation. The study indicates that these 25 million persons spent nearly three billion dollars for 500 million days of sport, and drove their automobiles more than 10 billion miles and spent an average of \$114.42 each in support of it. The Fish and Wildlife study was conducted by a private survey firm at a cost of \$134,000 and was financed through federal aid funds derived from excise taxes on sporting arms, ammunition and fishing equipment.

SPORTSMEN AND OTHER RECREATIONISTS are expected to be among the supporters of the wilderness preservation bill which will be reintroduced in the 85th Congress. The bill was introduced late in the 84th and never reached the hearing stage. Senator Hubert H. Humphrey of Minnesota, author of the bill, has indicated that he hopes for early action on it next year. Briefly, the measure would establish by act of Congress most of the wilderness areas now set aside by administrative action of the land management agencies. This would mean that wilderness and similar limited-use areas in national forests, parks and wildlife refuges would be held inviolate and could be eliminated or substantially altered only by future acts of Congress. Opposition to the bill has been strong, on the basis that it violates the multiple-use principle now applied to most federal lands.



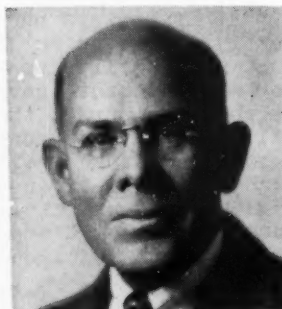
Governor Frank J. Lausche
Field of Public Servants



Gustave P. Backman
*Field of Business
and Industry*



Dr. Herman Haupt Chapman
Field of Education



George Harris Collingwood
Field of General Service

Dr. Paul De Leon Sanders
Field of Public Information



THE American Forestry Association was honored to present its 1956 Distinguished Service Awards at the annual meeting banquet in La Plata, Maryland. These awards are presented annually to five individuals whose selflessness in service has resulted in outstanding contributions to either conservation knowledge or action programs. The program, underwritten in part by the Sears-Roebuck Foundation, is also designed to focus national attention on these good works and thereby inspire others. Louis H. Wilson, of the National Plant Food Institute is chairman of the Awards Committee. Other committee members are: R. E. Bass, Bryce C. Brown, Paul M. Dunn, Arthur R. Spillers, and Congressman W. M. Abtitt.

The Honorable Frank J. Lausche, governor of the state of Ohio—Award in the Field of Public Servants. Governor Lausche has “carried

Harriman professor emeritus of forest management, School of Forestry, Yale University—Award in the Field of Education. Often referred to as the “conscience” of the forestry profession, “he exemplifies the highest type of professional ethics. . . . His fine example of service in the public interest has been reflected in the many generations of students who have gone forth from his class room to do the work of forest conservation . . . just a little more effectively for having profited by his example. His contributions are especially notable in the development of forestry education, in public service, in applied research in forest management in the South, and in advancing professional standards.”

Gustave P. Backman, executive secretary, Salt Lake City Chamber of Commerce—Award in the Field of Business and Industry. “As many people in renewable resources have informed us, here is a dynamic, ag-

CONSERVATION AWARDS

on a personal crusade for conservation of natural resources ever since he entered public life. . . . When the people of his state sent him to the Governor's Mansion, he immediately started pressing for conservation reform on a broad front. . . . As a result, his state in recent years has witnessed widespread reclamation of strip mine lands, abatement of pollution, construction of lakes and ponds, increased reforestation and tree planting, improved soil conservation, and better forest management.”

Dr. Paul De Leon Sanders, editor of the *Southern Planter*, Richmond, Virginia—Award in the Field of Public Information. Since Dr. Sanders assumed the editor's chair in 1934, “no newspaper in the nation has devoted more careful thought and space to both agricultural and forestry matters. Nor has this man been content to speak through the pages of his periodical. Equally at home on the platform, he has made as many as 100 addresses a year on agricultural subjects. . . . In 1954, he served as chairman of a study of natural resources in Virginia.”

Dr. Herman Haupt Chapman,

gressive, broad-gauge and enlightened individual who for more than 30 years has been tireless in pressing for those resources programs in the public interest that would better both his own state and the entire nation. Active promotion of the Civilian Conservation Corps, restoration of depleted watersheds, development and wise use of water and water power, improved mining legislation, good forest management practices.”

George Harris Collingwood, analyst, Legislative Reference Service, Library of Congress, Washington, D. C.—Award in the Field of General Service. “After more than 40 years of service, he has been selected . . . as one who has the unusual ability to lead the public mind to see the necessities of the situation. . . . In 1928, he joined the staff of The American Forestry Association where for 12 years he directed much of the association's educational work, wrote countless articles for its magazine, *AMERICAN FORESTS*, worked for necessary forestry legislation, lectured all over the country and still found time to utilize his skill as a dendrologist in authoring that classic in this field, *Knowing Your Trees*.



Editorial

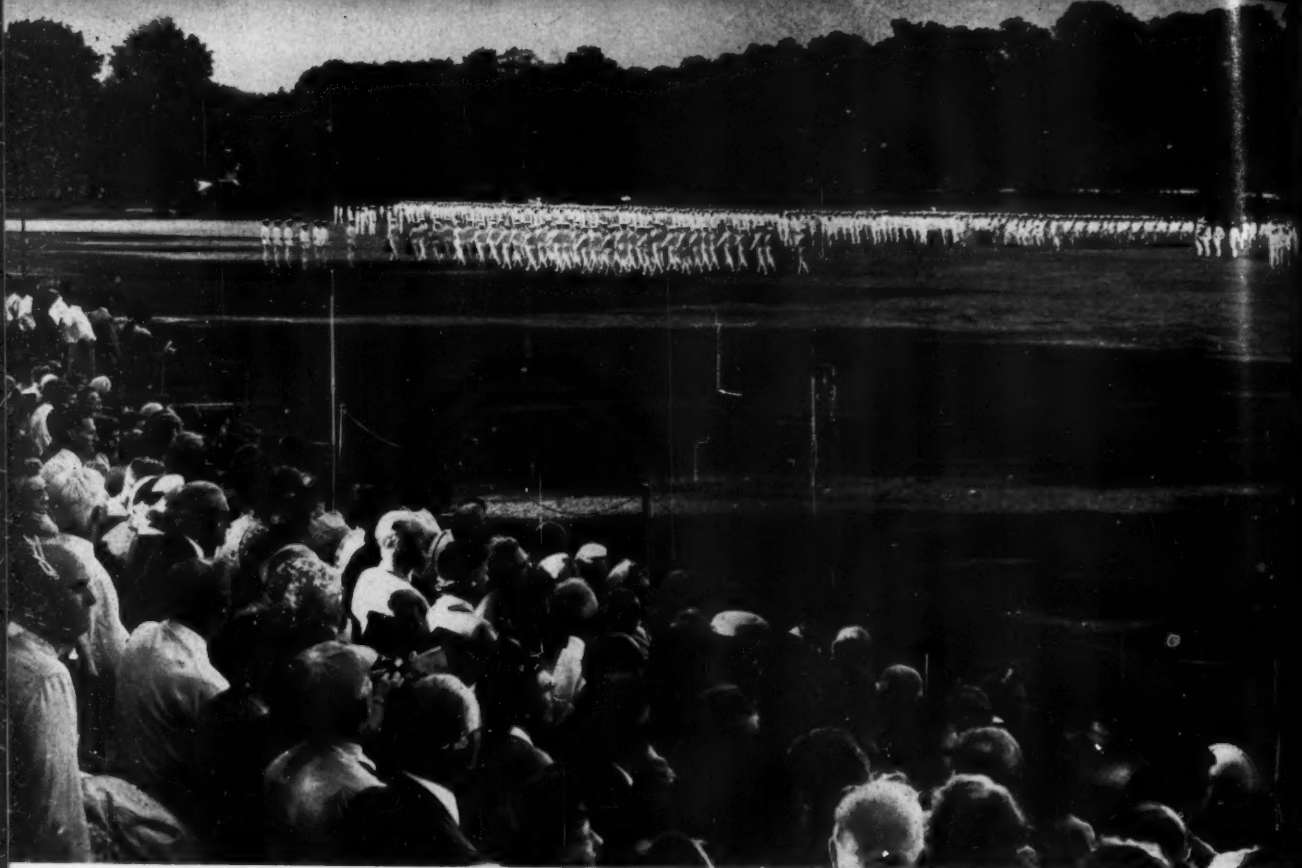
TONGUES IN TREES

ALMIGHTY and Eternal God, Who Alone can make a tree, guide us these days, and make our deliberations fruitful. And in our human need to use symbols in order to portray the unseeable reality of Your abiding Presence in our midst, would You allow us, in all reverence, to use that which now occupies our corporate attention these days to be our symbol of You.

In our forests, to hear the sermons in stones, to read the books in brooks, and to listen to the tongues in trees, and thus instructed, to conform to Your directing laws and wishes. Help us to recognize in the leafened shade of a tree a token of Your fatherly Providence and a haven of refuge against the heat and the burden of the day. Let us see in its summery greenery a pledge of hope; in its autumnal brilliance, a foretaste of our own eternal glory in You; in its stark wintry bareness, a reminder of Your Son's passion and death upon a tree; and in its springtime budding, a burgeoning promise of the eternal rebirth of ourselves into life everlasting.

Grant that we as Americans may ever be deeply rooted in the firm, life-giving soil of principles derived from the Natural Law of Your making; that no dry rot of moral corruption may attack the strong fibre of our national strength; that our entire purpose, individually and hence nationally, be that of conscious helpfulness to others, for Your greater honor and glory, through Christ Our Lord. Amen.

Invocation
81st Annual Meeting
The American Forestry Association
Rev. Neil Gargan, S.J.,
Pastor, Sacred Heart Church,
LaPlata, Md.



With the band playing "Maryland, My Maryland," Midshipmen at Annapolis wheel and pass in review before delegates to AFA's Annual Meeting honoring 50th anniversary of forestry in Maryland

The American Forestry Association 81st ANNUAL MEETING

AFA's Program for American Forestry goes marching on. That was the significant fact to come out of the 81st Annual Meeting last month at La Plata, Maryland, where a substantial record of achievement was presented to 450 delegates from all over the country. Here are some of the highlights.

- *Small woodlands show progress*—While the Timber Resource Review shows that we still face formidable tasks in this field, the convention's comprehensive examination of this entire area also showed solid gains on almost every front. As speaker after speaker from every section of the country reported on progress, it was impossible not to experience a glow of elation. When Bernard G. Torreyson, of Wayside, Maryland, almost popped his buttons when his five-year-old

son, Bernie, got a cash award for planting a 10-acre plot on his farm, it was easy to let go with a real war whoop of pleasure. While it is too early to accurately digest and analyze all the papers presented at the convention (we are going to let readers do that themselves in this issue starting on page 14), we would say that at least two significant facts were revealed. They are: 1) Reports by the many professional foresters and technicians would indicate that we have not entirely done justice to progress already chalked up and in the works; 2) While this may be debatable, we seem to detect a somewhat healthier attitude in regard to what we used to call the "small woodlot problem." Today, on the basis of the La Plata meeting, it is re-

garded less as a "problem" and more as an "opportunity" that we intend to take in stride. Foresters themselves seem to be shedding some of their shiny aura of professionalism. By which we mean they seem to be talking less like a brand new M.D. with his shingle, and more like an old-time, country practitioner who relies as much on his common sense as his professional training. This analysis *could* be wrong; but that is the way it adds up to us, and personally we like it.

- *The Fire Front*—Following the Southern Forest Fire Prevention Conference which AFA co-sponsored with other southern organizations, the battle against forest fires is on the move. Following a swing in September through southern states, Chief Forester Kenneth B. Pomeroy

reported state meetings either held or being planned in Alabama, Mississippi, Arkansas, Texas, North Carolina, Florida and West Virginia. After holding state meetings, some of these programs are now going right down to the counties. These are hopeful developments. It might also be reported that nothing AFA has participated in in recent years has afforded the association's Board

free exchange of forestry knowledge, the Board of Directors strongly urged that the Fifth World Forestry Congress be held in the United States in 1960. "The timeliness of the United States offering to be host to the Fifth World Forestry Congress . . . especially in view of this country's position as a world leader in technological development and its present large program of tech-

complishments in forestry and forest products utilization. The mutual gains from an exchange of ideas and experience with forestry leaders from many countries would be great. Encouragement of better understanding and closer cooperation internationally would result."

- **Outstanding Exhibits**—In the opinion of the Board of Directors, the exhibit pattern at the



Over four hundred delegates, from all parts of the country, explored problems facing America's small woodland owners

Assistant Forester A. R. Bond explained to members how goats are used to rid forests of a creeping menace—honeysuckle

of Directors more solid pleasure than the reactivation of this southern fire program started originally by former Executive Director Ovid Butler.

- **Research Congress**—An inspirational address by Dr. Reuben G. Gustavson, of the Resources for the Future, on tools for today and tomorrow as provided by science (See page 28) furnished the perfect springboard for AFA's next step in the activation of the research phases of its Program for Forestry. As authorized by the Board of Directors, AFA next year will sponsor a North American Research Congress September 30 through October 3 at Madison, Wisconsin, with the theme "Utilization Today and Tomorrow." The big Forest Products Laboratory of the Forest Service will provide the backdrop for this important event that will draw experts from Canada, Mexico and Europe as well as the top-flight men in the United States.

- **Fifth World Forestry Congress**
In a greater effort to promote

nical assistance to under-developed countries is self evident," the board said. "Great benefits can be derived through impressions gained and contacts made in this country by several hundred visitors from abroad given an opportunity to see our ac-

Maryland meeting set a new high in excellence. The indoor exhibits at the LaPlata Armory featuring forestry in small woodlands were conceived, prepared and developed by the Forest Service of the Department of Agriculture. Commer-

Only tailgate seats were left for Harry Mosebrook, the American Pulpwood Association (l.) and M. E. Taylor, Trees for Tomorrow



cial and educational exhibits that encircled the picnic area at Cedarville State Forest were organized by the Maryland Extension Service, the Maryland Department of Forests and Parks and invited commercial interests. "A topflight presentation, imaginatively conceived, and magnificently presented," was the board's verdict on these features.

- **Land Ownership Study**—DeWitt Nelson, chairman, reported

the state. Dr. Dana, who will direct the study, merely said "he was going to make a study, and he didn't have any conclusions to offer before it was made."

- **AFA Retirement Plan**—Inside the immediate AFA family, there was elation as the result of the adoption by the board of a staff retirement plan for employees. A contributing plan as offered by Aetna Life Insurance Company, the plan, based on the present wage schedule,

To the surprise of a few doubters, visiting and local, the whole show went off very well, with fewer snags than one might expect in larger communities well accustomed to entertaining conventioners."

How did members like their rural convention? If advance reports are any indication, most of them had a whale of a good time. La Plata, a community with a population of 1200, may be small in size but is big in heart and hospitality.



DeWitt Nelson, chairman, reported progress of AFA Land Ownership Survey



Reed McDonagh, president of Charles County Chamber of Commerce, kept the wheels moving



Dr. Wilson Compton paid tribute to Maryland's forestry accomplishments

ed to both the convention and the Board of Directors on the California study to be launched this month under the direction of S. T. Dana. Initial meeting of the full committee was held in San Francisco July 25-27. Purpose of the meeting was: 1) to crystallize the committee's thinking; 2) to sound out the thinking of other representative groups and agencies. While a total of 70 groups participated, "not one sour note was sounded," Chairman Nelson said. The committee was disappointed that many recreational groups in the state failed to accept invitations. The California study, Mr. Nelson said, will be a "foundation study, not a definitive study"—or to paraphrase it another way, "this is a study to see how a study can be made." One point stressed by Mr. Nelson was that this is *not* a study pointing to liquidation of public lands. To the people of California, the national forests, for instance, are an integral and important part of

will cost the association a total of \$78,902.00 for past service, half of which sum will be paid the first year from the association's endowment fund. The total cost to the association, apart from employee contributions, will be \$7,553.00 and the board authorized the use of endowment fund interest and dividends to pay this annual cost. The plan was developed by the finance committee consisting of James J. Storrow, of Boston, Mrs. Katharine Jackson Lee, of New Hampshire, and H. B. Shepard, of Boston.

- **Motel Convention Workable**—Newspapers generally evinced considerable interest in what they referred to as the first "national motel convention" in a rural area. Said the *Washington Evening Star*, "Planners of the . . . convention couldn't bring the forest to the convention so they brought the convention to the forest." Commented in the *New York (Sunday) Times*, ". . . the meeting developed a festive spirit, that often accompanies pioneering.

The town was a maze of welcoming banners and billboards. The convention itself was regarded as a community project as headed up by Reed McDonagh, young president of the newly-organized Charles County Chamber of Commerce.

Guests were housed in a chain of attractive motels ten miles north and south of LaPlata on Route 301. Feeding and transportation were the major problems. While a few hitches developed in feeding delegates on tour of the county, the ladies of the United Methodist Church (350 members) headed by Mrs. Robert P. Bowling, Jr., pitched in and gave the delegates one of the best banquet repasts in the history of the association. Plates piled high with ham, turkey and our own great programs."

Chief R. E. McArdle to comment with considerable satisfaction, "This is the first time I ever got enough to eat at one of these affairs."

Transportation, a major problem for those without cars, was organized efficiently by John D. Mitchell and C. Mitchell Digges, both of La Plata. A dispatcher's office on 24-hour duty was set up at the armory with a convention telephone num-



The Honorable Theodore R. McKeldin, Governor of Maryland (left) cordially welcomed AFA members to the Free State



La Plata's Methodist Church members displayed their culinary talents and southern hospitality when catering for banquet

ber. Dealers' cars with volunteer chauffeurs were dispatched to any motel where transportation was needed. School busses transported delegates to and from forested areas and on other tours. Nor did the hospitable Charles Countians content themselves with scheduled tours and meetings. An oyster roast at Chapel Point was a highlight of the convention as organized by Mrs. Ben Walker, of La Plata. Many of the famous pre-Revolutionary homes were opened up to the delegates by their owners for the first time other than for historic Garden Week.

Governor Theodore McKeldin, of Maryland, made a great hit with the convention guests. In welcoming them to the Free State, the governor provided them with an illuminating history of the state that received favorable comment by people from some 32 different states. "I like a man who is proud of his state and knows its history," commented a California professor with considerable satisfaction.

Turning to resources, Governor McKeldin said that "fifty years of forestry in the state demonstrates what wise state assistance can accomplish. It shows how the interests of the whole citizenry and the private

landowner are identical. What has aided the private landowner in forestry in Maryland in the last 50 years has benefited the public of this generation, and will continue to benefit generations to come through the conservation of forest and soil resources, water supplies and wildlife."

Governor McKeldin stated that in Maryland he was singularly fortunate in having the aid of competent Joseph F. Kaylor, director of Forests and Parks, and "all I have to do is to have the good sense to follow the advice of the heads of his competent departments."

Forestry is good business in Maryland, Governor McKeldin stressed. "Landowners and operators receive 10 million dollars annually from forest products. Wholesale value of lumber, millwork, furniture and paper produced in Maryland annually is valued at 60 million dollars. Of all people employed in manufacturing, seven percent are engaged in producing forest products.

"Contrary to popular belief, the forests of Maryland are not being cut faster than they are being renewed," the governor said. "In 1943, Maryland wisely enacted the Forest Conservancy Districts Act, the first such act east of the Mississippi

River. Its broad objectives are—increased and continuous income to woodland owners through scientific management of their lands and reforestation to promote flood control and to prevent soil erosion.

"Maryland is one of the few states that has maintained its forests and parks under the same control. Now rapidly changing social conditions present a new challenge to the Department of Forests and Parks. Maryland has changed from a predominantly rural to an urban population and ranks seventh in the nation in rapidity of population growth.

"The need for recreation centers where Maryland citizens can enjoy outdoor life in rural surroundings has become imperative. The Department of Forests and Parks is meeting the challenge as rapidly as possible by expanding its state parks, increasing recreation facilities in the state forests, and adding new park acreage and facilities."

Dr. Wilson Compton, vice president of AFA and president, Council for Financial Aid to Education, thanked Governor McKeldin for his warm welcome and saluted the governor for his support of Maryland forestry. Maryland, Dr. Compton said, has seen all the phases of forestry development including 1) the wilderness of early pioneer days; 2) the scourge of forest fires; 3) discovery of the worth of forestry to modern society; 4) the gradual restoration of Maryland forests; and 5) the gradual development of a permanent forest industry.

"All in the space of 50 years," Dr. Compton said in reminding out-of-state delegates that this year marks the 50th anniversary of the Department of Forests and Parks in the

(Continued on page 40)

Tour of Maryland's historic capital, Annapolis, was a highlight of annual meeting. After visiting the State House, members paused in front of the Chase-Lloyd House.





Richard E. McArdle, chief, Forest Service (right) welcomes British estate forester William Seymour

"The Place of the Small Woodland Owner in the Future of America's Timber Supply"

By **RICHARD E. McARDLE** *Chief, Forest Service, U. S. Department of Agriculture*

TAKE a good look at the men and women around you. Here—in this room—you see a good sample of the people who hold in their hands a large part of America's forestry future. Here is a cross section of those who own more than half of the forest land in this country. Here, too, are public and privately employed foresters and others engaged in helping these landowners do a better job of forest conservation. You are important people. You have a bigger place in this country's future prosperity than you may think.

This is a significant meeting. It may be that today we turn another corner in forest resource conservation. I think you have it in your power to do just that. And I think you will.

Twenty years ago this meeting could not have been held, nor ten years ago. Very few people realized that the smaller forest landowner was destined to have so large a place in America's forest conservation picture.

Today we know more about America's forest land. We know more about how

much we have, where it is, who owns it and what condition it's in. We know more about our future requirements for timber, for water and the other products and services of forest land. And we know now that a lot of our forestry future depends on what the smaller forest owners do with their land and on what the rest of us can do to help.

Today I'm not going to talk *about* small forest landowners; I'm going to talk *to* them. Through the small landowners who are here and through the rest of you attending this meeting, I hope to get my message to all of America's 4½ million small forest landowners.

Yes, there are a lot of you. You make up 99.9 percent of the forest landowners of this country. You own considerably more than half of all the commercial forest land, public and private combined; you own three-fourths of the forest land in private ownership. Some of you own a few hundred or a few thousand acres, but most of you own less than a hundred acres of forest land. Half of you own less than 30 acres.

About three-fourths of you own farms and your forest land is a part of your farm property. More than a million of you, however, are business and professional people, wage and salary earners, housewives, retired people and as a group you have more than a third of the forest land in small ownership.

In one respect most small forest landowners are alike. You don't earn your living by growing timber crops. With you, trees are a side line. The larger forest landowner usually operates a sawmill, pulp mill or some other forest products factory. He may have to grow timber to keep his factory going. You don't. For many small forest landowners the value of these lands is not for growing timber crops alone but as a place to play and relax, to encourage propagation of wildlife, to control movement of soil and water and so protect lower lying lands used for other crops.

All such uses of forest land have an important place in the broad forest conservation picture. But my assignment today concerns the timber production

aspect of forest conservation and I must talk to that point. Again I want to talk directly to you as forest landowners.

Where do you 4½ million small forest landowners, you who have half of our forest land, fit into America's timber supply future? To take a fresh look at what the situation is; to see what's being done to make these many small forest areas productive; to find out what needs to be done—this is the purpose of our meeting.

I said that most owners of small tracts of forest land don't grow timber to make a living. But I hope you *will* grow timber because much of this country's future timber supply will have to come from your lands. All of the public forest land and all of the forest land owned by wood-using industries, all of this land together can't produce the wood this Nation will need. And even today the small forest properties are contributing a substantial part of the Nation's requirements for wood. I said that you are important to our country. I say it again.

Now I know all of you are patriotic. I know you want this country to have the basic natural resources that give us a high standard of living in peacetime and make us strong if war should come our way. But I also am realistic enough to think that I'd not get very far by urging you to grow timber simply because the Nation will need timber. Ward

Shepard, one of my longtime forestry friends, once said that he'd known since he was six years old that whales are on the decline, but he'd never done much about it. So I'm not going to talk generalities and broad national needs. I'm going to talk about the opportunities that forest landownership can bring to you as an individual.

Practically all the small forest landowners I've ever talked to ask me the same question. Sooner or later they begin to worry around to the depressing thought that maybe after they do all this forestry work there might not be a market for their timber. So let's talk a little about that point.

The population of this country is growing rapidly. Our living standards are rising. Wood is an essential raw material. So it should be no surprise that national requirements for wood are increasing—wood for more homes, more furniture, more wood pulp for paper and paper products, more wood for hundreds of other uses. Timber is not a surplus crop now. It is not likely to be so by the time your timber is ready for harvesting. I think you can bank on a future in timber production. Wood will continue to be needed in large amounts.

Another fact yearly becomes plainer. The larger wood supply of the future will have to come from about the same acreage of timber-growing land that we

have today, or perhaps a little less. In some places the area in forest may increase as land devoted to other crops is planted to trees or abandoned land reforests naturally. But offsetting this will be forest land taken out of timber production for expanding cities, for highways, for reservoirs, for electric power transmission lines, for recreation areas, and for many other purposes. All of our studies point to the strong probability that there will be less, not more land available for timber production.

There is another angle to this that you might like to know about. The sale value of forest lands is increasing. Many of the larger private forest owners and some of the smaller ones are expanding their holdings. I would expect consolidation of forest properties to continue. If your forest land is in productive condition it obviously will have a higher sale value than a scrubby, run-down forest property. Have you tried to buy any forest land recently? There was a time—not many years ago, either—when you could get all the forest land you wanted at bargain prices. Not any more. If you already own forest land you're in luck. Put it in productive condition and you'll be luckier still.

To be sure, there are some risks involved in this timber-growing business. I'd not be fair to you if I didn't say so.

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Mr. Goddard

"AS VIEWED BY THE STATE FORESTER"

By MAURICE K. GODDARD

Secretary, Pennsylvania Department of
Forests and Waters

all other classes of ownership are producing at 80% of their potential. If productivity of the 265,000,000 acres in the small ownership class is brought up to 80%, the production of timber in the country would increase by 37%. This would amount to an annual increase in growth of 5,270,000,000 cu. ft.

It is predicted in the Timber Resource Review that by the year 2000 our population will have increased to 275,000,000 from the present population of 165,000,000. Their upper level predictions are that by the year 2000 the per capita consumption will have increased from 65 to 76 cubic feet, and the demand for wood will have increased from 12 to 22 billion cubic feet. Merely by bringing the small private woodlands up to 80% productivity, our annual growth will increase from 14¼ to 19½ billion cubic feet. This alone would nearly meet the projected upper level

demands in volume for the year 2000.

Any project with such potent possibilities should be advanced, promoted, and encouraged to the fullest possible extent.

One could continue to analyze the national situation; but in the short time allotted, it would seem more appropriate and more constructive to confine the discussion to what can be and what is being done in a more limited area. Now Pennsylvania is a good example of a state with typical small woodland problems; and, as it is a state with which I am familiar and proud to represent in this discussion, I shall center my remarks on its problems and our plans for solution.

The 15,205,000 acres of forest land in Pennsylvania cover over one-half the state. Private ownership accounts for 78% or 12,000,000 acres. Approximately 1,800,000 acres are state forests, 877,000

THE most fertile field for improving forestry practices throughout the United States undoubtedly lies with the small woodland owners. "The key to America's future timber supply lies in the hands of the small woodland owners." They own 54% of the commercial forest land in America. The recent Timber Resource Review completed by the United States Forest Service shows that this class of ownership is producing at only 40% of its potential. Generally,

acres are state game lands and other state-owned areas, 157,000 acres are county, community, and school forests, and 500,000 acres are in federal ownership.

The publicly owned forests are essentially all under sound management plans. Larger industrial concerns, particularly those with extensive land holdings, such as pulp and paper companies, usually employ foresters on a full-time basis. Consulting foresters are often employed by other large private owners.

But the situation among the 277,563 ownerships of 100 acres or less, which amount to 6,715,000 acres, points emphatically to the need for an extensive private woodland assistance program. Low levels of growing stock and poor quality sawlogs require good forestry assistance now to build up for future demands. In order to be in the best possible position to sell forestry to these 277,563 forest landowners, the Department of Forests and Waters has completed and placed in operation comprehensive management plans for the 1,800,000 acres of state forest lands in the state. The annual allowable cut under these plans is 56,000,000 board feet and 400,000 cords. The execution of these plans necessitates sound forestry operations which serve as object lessons throughout the state. These include cutting less than annual growth to build up

growing stock and silvicultural marking of trees to be cut so that sawlog quality will be raised.

The timber operations carried out under these plans provide for more industry and employment and result in the production of more water, game, fish, and recreation. The general objectives of the plans are to:

1. Produce the greatest possible sustained supply of timber products.
2. Improve species composition and quality of existing stands and provide for adequate residual growing stock as well as reduce the damage caused by insects and diseases.
3. Regulate the cutting of timber so that the supply and flow of products from the forest will be constant and adequate. This will tend to stabilize wood-using industries and the employees and communities dependent upon them.
4. Develop and preserve the recreational values of the forests.
5. Protect the watersheds from erosion and obtain from them the maximum yields of usable water.
6. Harvest timber in such a way that an adequate, uniform supply of food and cover for wildlife is produced.

As these plans for the state forest lands were being completed, the department started to develop a definite pro-

gram to assist the small woodlot owners. A cooperative forest management agreement was signed with the United States Forest Service this spring and six foresters who spend at least 75% of their time on this type of work were assigned to the project. Within several months after the agreement was signed, the force was increased to ten. But this means only 1 service forester for every 28,000 owners of less than 100 acres. Our next objective is to have a cooperative forest management forester in each of the twenty state forest districts. Ultimately we hope to have service foresters in practically all of the 67 counties.

Our foresters know basically what must be done, and all over the United States good forest management is being promoted by forestry consultants, by industries, by influential organizations such as The American Forestry Association, State Forestry Associations, the Society of American Foresters, and by state and federal agencies. Many means of reaching the public are being used: posters, roadside signs, radio, television, popularly written brochures and pamphlets, news releases, and articles by many important writers. Originally the theme was entirely fire prevention, but gradually the emphasis is changing to include other aspects of management. Now that the public is giving wide acceptance to

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Mr. Gray

ALL of us agree that the acceptance and practice of forestry by a substantial proportion of our small private owners is now a major need. How can we bring this about? What is keeping the majority of our small owners from practicing forestry to at least a reasonable degree? What do they need to do so?

There is no one answer to any of these questions. We will still be looking for answers at the close of this meeting.

"AS VIEWED BY EXTENSION"

By JOHN L. GRAY

*Extension Forester, North Carolina
Agricultural Extension Service
Raleigh, North Carolina*

By sharing our various experiences, however, we should leave here with a better understanding of the situation, what is now being done about it, and what needs to be done.

At the present time, Agricultural Extension Services of the land grant colleges in forty-five states, plus Puerto Rico, are currently conducting extension forestry programs. Although the underlying philosophy, "To help people help themselves," is the same, program organization and execution vary considerably from one state or group of states to another. This decentralization is carried right on down to the county and community level. This is necessary since we are dealing with a great variety of personal situations and attitudes and forest conditions.

Therefore, in discussing extension's

view of the small woodland situation, I am going to stick mainly to our experiences in North Carolina. Let me first fill you in briefly on the situation in our state. We are a major forest products producer, ranking first in the manufacture of wooden furniture, first in the manufacture of hardwood plywood, and fifth in lumber production. We rank sixth among southern states in the production of pulpwood. Fuel wood, poles and piling are important products in our forest economy, also.

Sawlogs are our major product, accounting for about 62% of our annual cut. Our lumber production is about two-thirds pine and one-third hardwood. It is divided among some 3,650 individual sawmills, most of which are small portable types. Pulpwood ranks second, taking about 14% of our annual cut. At

the present time, 81% of our pulpwood production is pine.

This heavy consumption of pine and relatively light consumption of hardwood is one of our major forestry problems. Our pine sawtimber growth is now in balance with our cut, but we are growing about 60% more hardwood sawtimber than we are cutting. Over half of our woodland is now in hardwood-type timber. Yet, two-thirds of our forest land is best suited for growing pine and under present-day market conditions, will return more to the owner in pine than it will in hardwood. For example, certain upland areas in the central section of our state will in fifty years produce from \$500 to \$900 worth of pine sawtimber. The same land in oak and pop-

lar will produce only \$160 to \$240 worth of sawtimber over the same time period. Converting pine land which has grown up in hardwoods back to pine is a problem on which we have been concentrating recently. We will discuss this further later on.

By and large, we have adequate markets for pine and the soft hardwoods, particularly yellow poplar. In some sections of the state we have a good market for all hardwoods of medium to large size and good quality. Throughout the state, however, our forest owners have trouble moving small- to medium-sized, low-quality hardwood trees, particularly oak and hickory.

In an average year fires will burn over about 1% of our total forest acre-

age. Our major losses occur in the eastern or Coastal Plain section. For most of our forest owners, however, although fire is an ever-present threat, it is not a major deterrent to the growing of timber.

At the end of last year we had a total of about 190,000 acres in forest plantings. This winter we will add about 50,000 more acres to this total. This will still leave us with about 800,000 acres of idle, cut-over and understocked land to be planted. This is equal to 4% of our total forest acreage.

We are a small-woodland-owner state. We have more forest area in private holdings of a hundred acres or less in size than any other state. Three-fourths
(Continued on page 42)



Mr. Miles

LET me begin by expressing "industry's" sincere appreciation to The American Forestry Association for being included in this program at the national level. It is not too often that "industry" is asked to express its views. Quite often when it is requested to participate, its expressions, especially those concerning our natural resources, are misunderstood, or the public casts them out as being slanted, or distorted, and not in the best interest of our nation's welfare.

Perhaps all American forest industry will not agree with the views that I express today relating to "Small Woodlands." We had best therefore re-title this talk "Vance Miles' views on Industry's Views of Small Woodlands." This should keep me in the clear with my fellow foresters and also with my brother entrepreneurs in American industry.

My first impression of the request to present a paper on the subject entitled "The Small Woodland Picture As Viewed By Industry" was immediately one that demanded a lot of thorough research and a grand compilation of

facts and figures. We were well into the preparation of this paper when it was decided that the basic material at hand would be much the same as that presented by others on this program.

Thus, to avoid being repetitious and, assuming you have assimilated all the facts presented heretofore, this address will be confined to my impression of industry "viewpoints" only.

To lay a little foundation for my presentation, let me first create for you my idea of "industry." By some play of words, or association of ideas, the word "industry" creates the thought of some tremendous monster in the minds of many people. Legally most industries are capable of actions identical to those of an individual. In reality there are many different kinds and sizes of businesses in America that fall into the category of "industry."

Actually, most are owned and controlled, and their actions sanctioned, by a group of people, known as stockholders. Stockholders are people, usually drawn from all walks of life. They represent as many classes of people as there are classes. Industry, then, is simply a group of people who have joined together, through their joint investment of money, and who have created an individual known as a "company" to do business with other people.

General Motors is made up of 565,000 stockholders and 624,000 employees joined together financially to do business

with the people of the United States. General Electric is comprised of 348,000 stockholders and 214,000 employees engaged in private enterprise with the people of America. I, as an industrial executive, am merely a representative of a great many people doing business with a great many other people. My expressions are only with their sanction. My action as an industry representative is only a professional performance for and in behalf of the people I represent.

It so happens, in this particular instance, that the corporate individuals known as the forest industries of America are today in direct and constant contact with a very large group of people. This group we shall refer to as the "Small Woodland Owner." To define this small woodland owner, I would consider a person as qualified if he owns not more than 300 acres of woodland. This group has a great responsibility to the nation. From the millions of acres of woodlands on the farms of this country must come by far the greater part of the timber needed to supply the ever-increasing appetite of a constantly expanding wood-using industry.

Industry on the other hand has a dual responsibility. . . . First, the responsibility to do everything within its means to aid in every way possible the increased and sustained production of wood from the small woodlands of the United States; secondly to manufacture from this versa-

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FIRST PANEL



Seaboard Air Line Railroad's assistant vice president, Warren T. White, presided over the panels



J. V. Whitfield, president of the Forest Farmers Association Cooperative, was session's moderator.

What's Being Done Today in Small Woodlands?

BY THE EXTENSION FORESTER

By A. N. LIMING

*District Extension Forester
Versailles, Indiana*



Mr. Liming

I WISH to thank you for the opportunity of meeting with you and briefly discussing the important subject of "What's Being Done on The Ground Today in Small Woodlands." This could be answered very bluntly by saying that not nearly enough forestry is being accomplished on the ground. The subject applies especially well to Indiana since more than 100,000 farmers there own 2.9 million acres of forest land, mostly in 10 to 25 acre tracts. I believe this pattern of ownership is true throughout the central states region. This small acreage of Hoosier forests yields about 7 million dollars annually. This is because we produce some of the world's finest hardwoods which demand a relatively high stumpage figure. A very large number of specialty products is made from these hardwoods which range from clothespins made of beech to some of the fanciest white oak and walnut face veneers found anywhere in the world.

The alarming fact to me is that we estimate that less than 10 percent of our Indiana woods crop is well managed. At

least 50 percent of our woods in Hoosierland are still being destroyed by domestic livestock grazing, our greatest forest enemy throughout the hardwood region. Of the small woods owners who do protect their crop from grazing and fire, only a very few practice good management. Generally there are two classes of owners—the preservationist who cannot harvest a mature or ripe tree because it is too beautiful, or the liquidator who sells by the 20 or 40 acre block.

Yes, you have probably heard that we have reached a balance between the growth and drain on our timber stands. This is true. However, it is wise to note that in Indiana we are growing only about 70 percent as much high-quality logs as we are harvesting. Our largest amount of growth is being laid on low-quality species such as black gum, beech, pin oak, and the hickories.

The extension forestry staff at Purdue University presently consists of Mr. E. J. Lott, state extension forester, and three forestry extension specialists. One of these, Art Parrish, is located at Albion (northeast), W. L. Fix located at Jasper (southwest), and I am located at Versailles (southeast). We are the only extension department at Purdue where all of the specialists are located in a district in the field. We feel that this system has worked extremely well during the past ten years.

Our two broad phases of extension forestry work in Indiana can be listed as the Adult Program and the Youth Program. First I will speak briefly about our

adult work. We of course use media such as newspaper articles, radio programs, telecasts, and newsletters. The conducting of Tree Planting Demonstrations, Woods Management Tours and Meetings, County Wide Winter Schools, cooperating with agencies such as the Louisville *Courier-Journal* who sponsor the annual Tom Wallace Farm Forestry Awards Contest, cooperating with the wood using industries who sponsor such activities as the Tree Farm Program, are a regular part of our work.

Our work seems to accomplish most where a local County Forestry Committee is in operation. A good example of the results of an active forestry committee is in Jefferson County. This committee is under the very able leadership of John L. Sample who makes generous donations of time and efforts. Each spring we have a Tree Planting Demonstration in connection with one of the fourteen schools located in the county. The morning is used in giving slide talks on general forestry and during the afternoon the older children and interested land owners in the community are taken to a nearby farm. Here the best planting techniques are demonstrated, and a general discussion on tree planting is held. The committee selects a boy to attend the annual Indiana Farm Boys' Forestry Camp which is sponsored by the Indiana Hardwood Lumbermen's Association. Two boys are selected each summer by the committee to attend the annual 4-H Conservation Camp. A Forestry Field Day is held usually in Oc-

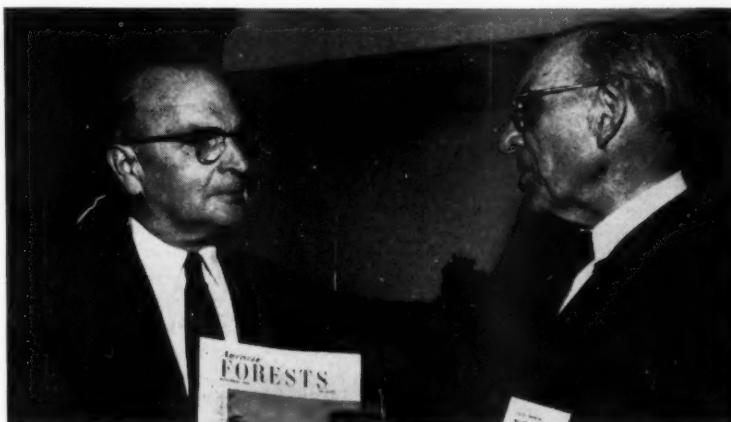
tober. A winter school or meeting is sometimes planned by the committee. Many requests for assistance in management and marketing are channeled through the committee. Members of the committee become enthusiastic and this interest tends to spread. Over 5,000 acres of forest land in this county have been entered under the Indiana Classified Forest Act.

One of the Jefferson County Forestry Committee members has the following story to report concerning his farm woods. "I have a 36 acre woods which I purchased in 1933. This tract was cut by the boundary in 1907-08. In 1918 there were several loads of oak piling poles cut. In 1937 three acres were thinned by the Civilian Conservation Corps. Hollow trees were deadened, and cull trees of low-value species such as sassafras, black gum, blue beech, and largetooth aspen were cut.

"Upon the advice of foresters, I have continued the woods improvement program which was started in 1937. Total value of products harvested from the 36 acre tract during the period 1937 to 1953 have amounted to \$1215.00. Products included 120 fence posts, 400 ricks of fuelwood, and 11,000 board feet of lumber. This is slightly more than \$2.00 per acre per year of net return. This may seem low in dollars and cents, but remem-

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AFA SALUTES THE SINCLAIR OIL COMPANY



Orville D. Judd, Sinclair Oil Co., (left) and AFA President Johnston

A citation to the Sinclair Oil Corporation for its series of advertisements to stimulate greater public interest in national forests and parks was voted unanimously at La Plata by AFA's Board of Directors. The board singled out an advertisement on the national forests for special praise. It showed a scene in the White Mountains National Forest in New Hampshire and "stresses the fact that the national forests belong to the people of America and are maintained for their benefit and enjoyment." The advertisement also included a salute to the work of The American Forestry Association. Mr. Orville D. Judd, vice president of the company, was on hand at the meeting to accept the association's citation from President Don P. Johnston. The board's resolution was presented to the convention by James J. Storrow, of Boston.



Mr. Barton

THE cooperative Forest Management program, which is administered by the state foresters in conjunction with the U. S. Forest Service, was formulated because two-thirds of the nation's forests are owned by citizens of the United States. The average size of these forest holdings is only 62 acres. As a very large percentage of the owners have no forestry training, the farm forester's responsibility under this program

BY THE FARM FORESTER

By **DAVID C. BARTON**

*Farm Forester,
Vermont Department of Forests
and Parks*

is to assist the small private woodland owners in the proper management of their forest lands.

Originally, we were called farm foresters; but now the title depends on which state we work in, as project foresters, district, county, local or service foresters. Irrespective of title, we are all technically trained foresters, ready to serve the private landowner and woods operators.

In the past, we have worked primarily on farm woodlands. However, many suburbanites have been buying abandoned farm lands for summer vacation lands. In my county, Bennington, Vermont, a rather high percentage of my time is spent with the non-resident landowner.

First, let's talk about what is being done on the ground today in the farmer's woodlot. The farmer is one class of landowner who may cut as a crop his own

forest products. Naturally, it is first necessary to make a preliminary reconnaissance throughout the woodlot with the farmer, in order that the various types of timber may be located. The proper method of cutting is explained for each type. Thinnings for pulpwood should be made in the younger stands to provide growing space for the more valuable trees. In these young stands, the trees to cut are those of undesirable species, trees of poor form which will never make valuable saw timber and those trees which have been injured by fire, insects, or disease.

In the older stands where merchantable sawtimber can be harvested, the aim is to remove overmature trees and those just previously mentioned. High grading, or the removal of just the more valuable trees, leaving the culls and un-

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Mr. Roller

BY THE INDUSTRIAL FORESTER

By H. M. ROLLER, JR.

*Conservation Forester
International Paper Company
Mobile, Alabama*

THE theme of this 81st Annual Meeting of The American Forestry Association, "America's Small Woodlands," is a most timely topic because each year more and more attention seems to be focused on the small timberland owner. This attention is rightly deserved I think, for two reasons—first, because of the importance these owners in the aggregate play in our timber economy and secondly, because of the tremendous potential on these small woodlots for increased timber production. I consider it a great honor to be invited to tell you something about what industrial foresters are doing to help bring the most important class of forest lands in the country up to their full timber producing capabilities. Since my experience in the industrial field has been confined to the southern pulp and paper industry, I hope you will keep in mind that my comments will dwell primarily on what only one phase of industrial forestry is doing; and that many other programs are also being carried out by other segments of the forest industries.

The wood using industries in the United States are carrying out a wide variety of programs of assistance with the small woodland owner. They range from the nationally co-ordinated educational program of the American Forest Products Industries to the county "Tree Farm Family" program of the local sawmill. They include national activities carried out by such organizations as the Industrial Forestry Association in the West and the Southern Pulpwood Conservation Association in the South. In general, these programs all have the same common goal—that is, to help grow continuous crops of trees on the privately-owned forest land. I would like to tell you how the southern pulp and paper industry goes about this job.

A number of years ago the pulp and paper industry in the South recognized the wisdom and necessity of actively helping the small landowner grow con-

tinuous crops of trees on his forest land. The basic reason for inaugurating such a program of assistance for these landowners is simply that they own about three-fourths of the commercial forest land in the South. The industry is and always will be, dependent upon them for the major source of its supply of pulpwood. The total amount of forest land owned by the approximately 70 pulp and paper mills operating in the South is only about 6% of the area's 193 million acres of commercial forest land. This dependency on the timber of the small owner was recognized even back in 1937 when there were only 30 pulp mills in the region using approximately 3 million cords of pulpwood a year. In order to set up and properly guide such a program, the Southern Pulpwood Conservation Association was organized in 1939 after a series of conferences with state, federal and other foresters to discuss how industry could best do the job.

Some 17 years later, we are extremely proud of what we have accomplished in our work with the private landowners in the 12 southern states in which SPCA member mills operate. The function of the association is still primarily to prepare and disseminate forestry educational material to the general public and for the member mills to use in their work with landowners and the school children who are the landowners of the future. I could cite impressive figures on the hundreds of newspaper releases or magazine articles, or the hundreds of thousands of pieces of literature which have been distributed, or the millions of people who have seen the forestry displays at fairs, or have attended public forestry demonstrations. I think that you are familiar with these media used to reach groups or masses of people, and that you want to know just what we are doing on the ground with that important man who owns the small woodlot.

The program of assistance for private landowners is actually carried out in the field by each of the member mills of SPCA rather than by the association's foresters. The methods of carrying out these activities vary somewhat with individual companies, but generally speaking the same basic program of assistance to landowners is carried out by the member mills. The men in charge of this work are called Conservation Foresters, and

several hundred are employed in this work with the small landowner. In most cases they devote full time to working with private landowners although with some companies their duties may be divided with wood procurement work.

A certain amount of interest in practicing good forestry can be generated through group contacts such as public demonstrations, but we feel that putting these necessary good forestry measures into effect can be accomplished much faster in many cases by direct assistance to the landowner. The Conservation Forester carries out this assistance in several ways—all of which are designed to show the landowner what to do and how to do it and then, after this initial help, hoping that he will continue to do these things on his own. For example, the basic thought behind the pine seedling programs is that through the gift of a small number of seedlings, the landowner will become interested in purchasing additional seedlings for planting on his land, and also, become more interested in the other trees which he has. We feel that we can best accomplish our aims in promoting good forest practices on the small woodland by informing, demonstrating, and providing some assistance in the woods to the landowner than by the threat of regulation or any other means. The incentive is thereby having a permanent market for his products.

I think for too long a time the small woodland owner has been the target for much unjust criticism. True, he may be forestry's biggest problem child, but I don't think we should forget that these small woodlots in the past have supplied the bulk of our timber requirements—and in many areas have grown several crops of forest products while the virgin forests have not. In addition, they have provided recreation, hunting, watershed protection and all the other benefits derived from a working forest. We believe that well-informed landowners will adopt adequate forestry practices when they realize their practical value. It is with this concept of conservation—use, but use wisely—that we approach the small woodland owner.

I think this program can probably best be stated in a few words by saying that we are trying to sell the small woodland owner on becoming a tree farmer.

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BY THE CONSULTING FORESTER

AT the risk of seeming provincial at a meeting concerned with nationwide forestry problems, I am going to confine my remarks to the consulting forester's work in my own state of New Hampshire. This is partly because it was impossible in the time available to make an adequate survey of consulting foresters activities throughout the states. Also I have recently been able to collect statistics and opinions from most of my colleagues in New Hampshire, and think this will give you a reasonably accurate and up-to-date picture here. Of greater importance are the relationships between private consulting and service foresters in the management of small woodland ownerships in New Hampshire. They differ in some respects from those in many other states. I believe a precise picture of the situation even in as small a state as this will interest you in your consideration of getting more forestry onto small privately owned woodlands. Perhaps it will suggest ways of making more progress in this important field.

The consulting forester's work covers two main fields. One is the collection and interpretation of facts and their presentation to the owner in the form of a report or other document. Included in this field are appraisals, boundary surveys, management plans and the like. The other field is management itself—the mechanics of running the forest enterprise. This may be management

By WILLIAM P. HOUSE

*Consulting Forester
Chesham, New Hampshire*

of controlled stumpage sales, or logging operations, or any of a number of cultural operations such as planting, weeding, thinning, and pruning.

In this field the forester often becomes more of a land manager, and in actual practice most consulting foresters in New Hampshire are a combination of the two.

In both fields he must charge enough for his services to cover his business expenses and to give him the return he requires to make a satisfactory living.

The common denominator in both fields is placing the interest of the client foremost and not allowing the consultants own interests to conflict with obtaining the highest returns and rendering the best service possible to the client. This is frequently not possible when the forest manager becomes a stumpage buyer.

The consulting forester's ability to conduct a successful practice depends basically, of course, on his own competence. It is strongly influenced by the type and condition of the woodland he has to work with, the economic position and motives of the owner, the market for forest products, competition from other consulting foresters, and competition from the various services provided by public agencies. It is also strongly influenced by the effects of the educational work of these agencies.

It is the relationship of the consulting foresters on small ownerships with the last two in New Hampshire which I wish to discuss today.

There are 36 consulting foresters and private timber managers in the state. Of these, ten are full and nine part-time consulting foresters, two are primarily operators specializing in improvement cuttings. Fifteen are in a single organization which operates its own logging crews and mills and bases returns to owners either on the profit from these operations or on a direct stumpage payment.

Together in 1955 these individuals and groups served 621 clients with acreage totalling 136,000 acres. These are not high percentages in terms of the 4,000,000 acres of private commercial forest and 35,000 owners involved, although the figures are a little more impressive if acreages of large industrial holdings are excepted. However, if we can keep this up over the years, a substantial percentage of the total small ownerships will be affected.

Included in the above are 22 million board feet and 9000 cords harvested in marked or otherwise controlled cuttings. This represents about 9% of the state's saw timber cut. Also included are 1258 acres of woodland improvement—not counting commercial thinnings—for 117 owners.

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BY THE MAN WHO OWNS ONE

By LEON SPICER

*Woodland Owner
Church Creek, Maryland*

in his forest holdings many years ago when State Forester Fred Besley started selling the idea of forest conservation and the value received from a well-managed woodland. He also organized protection against forest fires, and worked for forest fire control. All of which helped the small landowner.

During World War II, the demand for timber grew thus giving the small woodland owner an expanded market for his forest crop. Several mills moved into the area and cut much of the smaller stock.

Then in 1943, the Forest Conservancy Districts Act was passed in Maryland. This act provided for increased state assistance to private landowners. And, a

large scale educational policy on forest fire prevention and control was put into effect.

Since that time, the fire control organization has been stabilized, and the state has intensified its assistance to landowners.

However, forestry, like many other industries has become mechanized. The equipment is expensive, and many small woodland owners are unable to afford it. But in 1952, the Eastern Shore Improvement project was initiated to relieve this problem. The state organized training crews to operate on private lands at cost. Three crews are available in this area. Many landowners are taking advantage of this program, including myself.

Landowners now realize the value of their woodlands and are willing to spend money to improve them. But we are going to need all the help we can get.



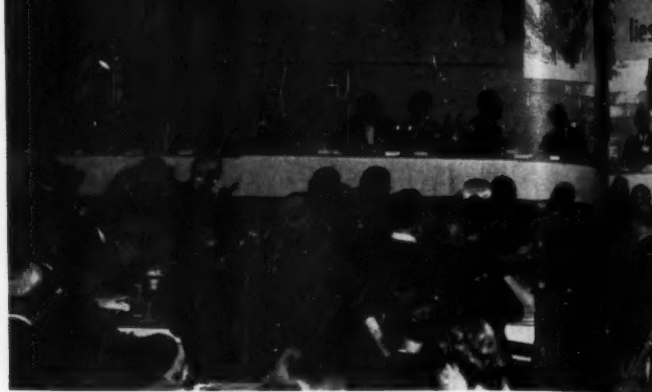
IHAVE heard quite a bit this morning about the low productivity of the small woodlands. However, I am here as a small woodland owner, and I can report to you that we have been solving that problem.

The small woodland owner in Maryland began taking more of an interest

THE 81st ANNUAL MEETING IN PICTURES



AFA members viewed four-cord charcoal kiln on Cedarville Forest, which was erected in 1955 to demonstrate making charcoal from poor trees in the forest that might otherwise not be used.



La Plata's new National Guard Armory was scene of AFA's indoor sessions and banquet. Exhibits in armory depicted theme of meeting, "America's Small Woodland Owners."



Representatives of most of the equipment manufacturers were on hand to demonstrate their wares. Heavy equipment was exhibited as well as several types of chain saws and spraying devices.



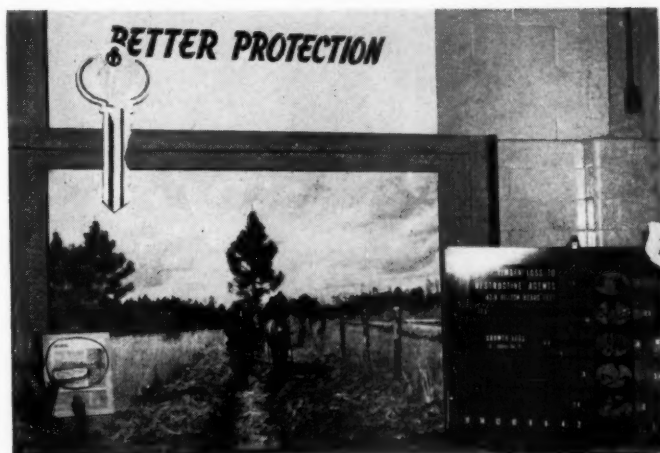
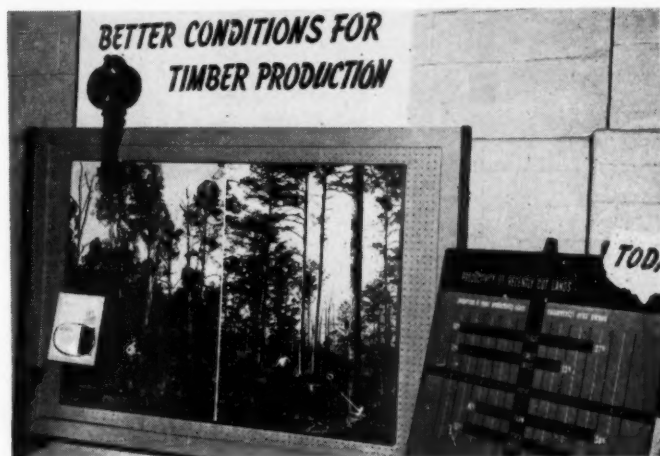
W. W. Bergoffen, Forest Service (left), in charge of Armory exhibits, with District Forester Adolph Pickall (center) and H. W. Dengler in charge of exhibits at Cedarville.

A Virginia pine demonstration area was a stop on the AFA tour of Cedarville State Forest. Here the pine had been harvested by the strip cutting method, as a means of re-establishing another crop of pines.





AFA members take time out for lunch during the busy day at Cedarville Forest. The educational exhibits included numerous uses of wood and wood products, collection of wild-life found in the state, and samples of the county's main crop, tobacco. After lunch, members were loaded on trucks and driven to several demonstration areas in the forest.



Exhibits for the Armory were prepared by the U. S. Forest Service, under the direction of William W. Bergoffen, of the Information and Education Division. To carry out the theme of the meeting, that the small woodland owner is the KEY to our future timber supply, large panels on walls of Armory, graphically illustrated the benefits derived from sound forest management and the methods to achieve that end.

PROGRESS ON OTHER FRONTS



Dr. Mobley

THE subject under discussion is one in which I have been greatly interested for more than a quarter of a century.

It has long been my contention that the future belongs to those who prepare for it—whether you speak of an individual, community, state or nation. Through the education of youth we prepare them and the nation for the future.

It is indeed, a pleasure to speak to the members of this great organization at its 81st Annual Meeting regarding the progress of youth training programs which are helping materially with the development, protection, conservation and proper utilization of the products of our small woodlands.

According to the U. S. Forest Service, about one-fourth of all commercial forest land is in holdings of less than 100 acres. There is a total of 3.8 million such owners—comprising approximately 84 percent of the total number of private owners.

These statistics clearly show, if we are to exercise influence in the conservation and proper utilization of our forest resources, we must of necessity find ways of reaching and teaching the several million people who have control of one-fourth of all commercial forest land.

In a country such as ours—where we cherish freedom of action and the free enterprise system—our best means of influencing the owners of one-fourth of the commercial forest land of the nation is through education of one sort or another. May I hasten to add that I am

YOUTH GROUPS

By **M. D. MOBLEY**

*Executive Director
American Vocational Association
Washington, D. C.*

fully conscious of the fact that public and private educational institutions are not the only sources of education in this country. There are many other agencies and organizations—both private and public—that play an important role in the education of both youth and adults.

With our ever increasing population, which will likely reach 200 million before the turn of the century and possibly 300 million by the year 2000, we must as a nation be vitally concerned

with the proper conservation and utilization of our renewable resources. Some of the older European nations have passed restrictive laws that force people to carry on practices that will insure continuous supplies of forest products. If we in this country are to avoid such restrictive laws, which personally I abhor, we must double and treble our efforts in the development of education programs that will acquaint our youth and adults with the importance of prop-



Mr. C. L. Hassinger, of Bristol, Virginia (second from right)

THUMBNAIL INTERVIEW—C. L. Hassinger, of Bristol, Virginia, has been a member of The American Forestry Association for 50 years. We finally caught up with him at the reviewing stand of the Naval Academy where the Midshipmen paraded in honor of the 50th anniversary of the state's Department of Forests and Parks.

Mr. Hassinger, a retired retail lumberman, is especially interested in the state of Pennsylvania, where he carried on many of his own business operations for many years. With a good natural resources department in the saddle, he believes that Pennsylvania lumbering, operated on a sustained yield basis, "will, in a few years, equal the old days—and on a perpetual basis . . . just go up there and look at some of the growth. . . ."

"Over the years, the AFA has had a greater impact on conservation than any other organization," Mr. Hassinger believes. "I don't always agree with it, of course. Looking back, I think the best thing it has done has been to expand its program beyond forestry alone to take in the other resources. To my mind, forestry and water are synonymous."

er and adequate conservation and utilization practices—and that will result in the use of such practices.

We should ever keep in mind that in a free enterprise system such as ours, an owner of property has the right, if he so desires, to use unsound and often destructive practices. Many small woodland owners, as you well know, do use such practices.

Educators must devote a part of their efforts in cooperation with other groups to the task of getting people to understand what to do and to creating within them the ability and desire to do the things necessary to conserve and use wisely our forest resources. This is an important part of the job ahead, if we are to avoid restrictive laws contrary to our American way of life and at the same time insure adequate forest resources to keep our nation strong and to insure high living standards for future generations.

From personal experience and from watching the fine work of others, I know that the youth of our land respond favorably to forestry education of less than college grade. Almost thirty years ago there was started in the state of Georgia a rather comprehensive program of forestry education. It comprised an important part of the offering for all or virtually all students enrolled in high school vocational agriculture classes. The program has been carried on continuously since its beginning. The idea was the brain child of C. A. Whittle, who was at that time employed as director of education of the Georgia Forest Service.

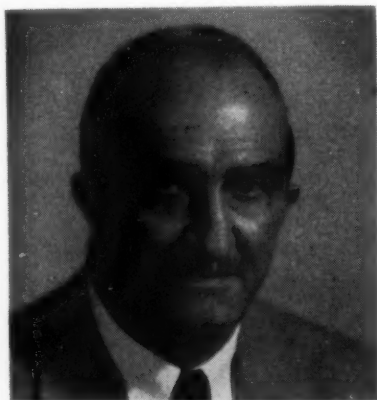
I shall not burden you with details of the plan; it has, however, resulted in probably 200,000 youths of the state receiving systematic, practical instruction in the management of forest land. The program from its inception was put on a *DOING* basis. The students not only learned what to do but carried out the

improved practices on the woodlands of their home farms.

Let us look at what has taken place in this state in terms of forest statistics. No one would dare give all the credit for the great progress in forestry in Georgia to the teaching of this subject by instructors of vocational agriculture. On the other hand, I believe that no one can deny the fact that the efforts of these teachers through the years have contributed much to the great progress in forestry in the state of Georgia.

From the beginning of the program, students were encouraged to plant seedlings on their home farms and to protect forests from fires. The vocational teachers soon found that forestry was a subject that could not be taught to youth in a hit or miss casual manner—such as holding a few demonstrations and placing in their hands a few leaflets and bulletins. These things help; but for stu-

(Continued on page 59)



Mr. Hoff

A PROGRAM to deal with *all* natural resources can get the help of *all* local people. So why not approach our forestry problems on a watershed or valley improvement basis?

That was the theme of Clayton M. Hoff, executive vice president of the famous Brandywine Valley Association, at AFA's La Plata conference on managing small woodlands.

The Brandywine Valley watershed contains 330,000 square miles and 200,000 people. It is drained by Brandywine Creek in Chester County, Pennsylvania, and New Castle County, Delaware. The area contains 85,000 acres of woodlands or about 17 percent of the total. Another nine percent of the area should be reforested.

Mr. Hoff, a former engineer for the DuPont de Nemours & Co., got into watershed improvement work as the result of his love for hiking and nature.

WATERSHED ORGANIZATIONS

By **CLAYTON M. HOFF**

*Executive Vice President
Brandywine Valley Association, Inc.
Wilmington, Delaware*

On these jaunts his trained eye saw eroded land and polluted streams. He resolved to do something about it, and the result was the Brandywine Valley Association.

The big prop of the association's program has been visual education. And by showing people the true conditions in the valley by means of slides shown before thousands of groups and in thousands of individual homes, it has been able to effect a cleanup of the polluted stream, take the erosion creases out of countless farms and put forestry on the right track.

To help control erosion, sound forestry practices were a must, Mr. Hoff's group learned. Consequently campaigning for clean streams has resulted in the formation of Forestry Services, Inc., which provides assistance to small woodland owners, and organization of a cooperative, Woodland Products, Inc. Formed eight years ago on a shoestring, it now has a plant evaluated at \$200,000 and is processing one and a quarter million board feet of lumber a year.

"To become a member, a man must own 10 acres of woodlands," Mr. Hoff told the convention. "The cooperative provides such services as sawing, thinning and marketing; and it is a good example of complete utilization for so-

called waste now goes into chips and is returned to the land."

In launching the valley improvement program, Mr. Hoff said the association worked very closely with the Soil Conservation Districts and the Tree Farmer organizations. With cleaning up Brandywine Creek the big objective, forestry, in the original phases of the program, was a secondary rather than a primary concern.

Later, as people learned that management of resources is a chain proposition that utilizes all renewable resources, forestry became a major concern for it was soon discovered that woodlands and trees can help check costly erosion and help maintain a level flow of water.

"Today, if the soil bank is properly administered, it appears that we now have another vehicle whereby good forestry and good conservation generally may be accelerated. Planting more trees on marginal land is one of the best things we can do in the Brandywine Valley."

Returning to his original theme, Mr. Hoff urged that conservationists consider *all* facets of proposed programs in any given valley; and in general it is usually found that one dramatic need can be effectively utilized to improve the whole resources picture.



Mr. Wetzel

SMALL WATERSHEDS PROGRAM IN RELATION TO FOREST CONSERVATION

By **JOHN H. WETZEL**

*Chief, Watershed Planning Branch
Soil Conservation Service*

IT IS indeed a pleasure to have this opportunity to explain to your organization, group, etc. the objectives of the Watershed Protection and Flood Prevention Act, Public Law 566, enacted by the 83d Congress in August 1954. The scope of the act was broadened by Public Law 1018, which the President signed on August 7, 1956.

First let me remind you that wherever you live, you are within a watershed. Your farm, ranch, home on a town lot, or your business in the city are all within the natural boundaries of some watershed. All the lands and waters of the Nation are bounded by natural drainage divides and therefore come within the scope of Public Law 566.

The problems of development, conservation, and use of water all fall within the natural boundaries of watersheds. Water respects none of our man-made lines, such as those of township, city, county, or state.

Land development, use, and conservation are directly related to water management. We use and treat the lands to conserve moisture from rain and snow, to prevent sheet and gully erosion caused by runoff, to prevent flood overflow, to store and divert water for irrigation, and to remove excess water by drainage.

In your watershed wherever you live, you share with all others there the tragedies of floods, washed-away land, mud-filled lakes, and water shortages. You also share with others the fruits of watershed protection, development, and flood prevention.

For years we have been moving toward more intensive watershed protection. It was a basic idea in the Executive Order of 1891 which set aside the national forest reserves and was carried into subsequent forest legislation. From its beginning in 1933, the Soil Conservation Service stressed the need for planning and treating entire watersheds. As the Soil Erosion Service in the Department of the Interior, it established the first

erosion-control demonstrations on a watershed basis and planned and applied farm conservation treatments. In 1935 the Soil Conservation Act, Public Law 46, created the Soil Conservation Service in the Department of Agriculture and expanded its responsibility for a national program of soil and water conservation.

Beginning in 1937, the states passed laws that authorized farmers and ranchers to organize and govern soil conservation districts. These local agencies, now totaling 2,776 throughout the Nation, are dedicated to planning and applying soil and water conservation measures to agricultural land. Some districts have watershed boundaries; all have small watersheds within their boundaries, and are parts of larger watersheds.

District and other leaders soon recognized, however, that an unbridged gap existed between the effective conservation work done by individual farmers and ranchers on their own land or by federal and state agencies on public

lands, and the large downstream dams and other developments on major rivers. In many cases, landowners were unable to complete their own conservation programs because of flooding and other problems they could not solve as individuals.

The Flood Control Act of 1936 was the first federal law to recognize the need for watershed protection and management as a principal means of flood control. Responsibility for "upstream flood control" was assigned to the Department of Agriculture. World War II delayed the beginning of operations under this law, however. Since 1947, upstream planning and treatment with all measures needed to conserve soil and water and to reduce flood and sediment damages have been under way in 11 watersheds covering about 30 million acres.

The second federal action came in 1953 when Congress appropriated \$5 million with which 60 pilot watershed projects were started. One objective was



McCULLOCH MOTORS CORPORATION PRESENTS GOLD-PLATED SAW TO FOREST SERVICE

"This is the first time I ever saw a gold-plated chain saw." Forest Service Chief R. E. McArdle commented when McCulloch Motors Corporation presented one to him as a token of the firm's esteem for the Forest Service. The saw, which attracted considerable attention, was the 500,000th saw to come off the McCulloch assembly line. "I'd say this saw is a symbol," the chief told delegates to AFA's convention. "You can't have strong forest conservation without strong forest industry. The two are inseparable. There's no sense growing timber if you're not going to use it." Governor McKeldin, of Maryland (shown above) studied the saw said to be worth \$2,500, and commented, "Offhand, I wouldn't say we are exactly in a depression." With the governor are C. D. Allis, of the firm, who is also a tree farmer, and Clint Davis, I & E Chief, Forest Service.

to demonstrate the benefits of combining soil and water conservation on the land with upstream flood-prevention structures. The other was to find out the best ways to achieve local, state and federal teamwork in planning and carrying out watershed protection and development.

The Watershed Protection and Flood Prevention Act provides for a watershed project-type approach to soil and water resource development, use, and conservation. Each project is a local undertaking with federal help; not a federal project with local help.

The Secretary of Agriculture is authorized to give technical and financial

aid to local organizations in planning and carrying out works of improvement for (1) flood prevention, or (2) the conservation, development, utilization, and disposal of water in small watersheds. The Soil Conservation Service has been delegated primary responsibility for carrying out the provisions of this act.

Congress in passing the Watershed Protection and Flood Prevention Act made clear:

That the additional authority of the act should be used to supplement both our present soil and water conservation programs and our programs for development and flood protection of major river valleys;

That the act will bridge the gap between these two types of programs and greatly enhance the ultimate benefits of both; and

That federal help should be made available only to assist local organizations to plan and install needed water-management and flood-prevention measures that *cannot* feasibly be installed under other current federal conservation programs.

In this way, Congress paved the way for a joint attack on complex conservation problems that individuals *cannot* be expected to solve with already existing technical, cost-sharing, credit, re-

(Continued on page 60)



Mr. Soule

I'M RATHER concerned about the theme of this session—"The Key of America's Future Timber Supply Lies in the Hands of the Small Woodland Owners." I'm concerned because I consider that my woodlot will contribute to the future timber supply and I'm a *large owner* of a small woodland.

The topic assigned me is "Forest Practices under the Agricultural Conservation Program." This U. S. Department of Agriculture conservation program is administered in Washington by the Agricultural Conservation Program Service. Mr. Paul M. Koger is the administrator. In the states and counties the program is administered by the Agricultural Stabilization and Conservation State and County Committees. The ACP was established under the Soil Conservation and Domestic Allotment Act of 1936. The program has been in effect continuously since that date. During the last ten years, Congress has made annual authorizations for the program varying from 150 million to 300 million dollars. For the past couple of years and for 1957 the authorization is for 250 million dollars.

FOREST PRACTICES UNDER THE AGRICULTURE CONSERVATION PROGRAM

By HARRIS W. SOULE

Director, Northeast Area

Commodity Stabilization Service, USDA

I think that you people would be interested in the general program principles under which the 1957 ACP has been developed:

1. The national program contains broad authorities to help meet the varied soil and water conservation problems of the nation. State and county committees and participating agencies design a program for each state and county within the authorities in the national program. Such programs include any additional limitations and restrictions necessary for the maximum conservation accomplishment in the area. The programs are confined to the soil and water conservation practices on which federal cost-sharing is most needed in order to achieve the maximum conservation benefit in the state or county.

2. The state and county programs are designed to encourage those soil and water conservation practices which provide the most enduring conservation benefits practicably attainable in 1957 on the lands where they are to be applied.

3. Costs are shared with a farmer or rancher only on satisfactorily performed soil and water conservation practices for which federal cost-sharing was requested by the farmer or rancher before the conservation work was begun.

4. Costs are shared only on soil and water conservation practices which it is believed farmers or ranchers would not carry out to the needed extent without

program assistance. In no event are costs shared on practices except those which are over and above those farmers or ranchers would be compelled to perform in order to secure a crop.

5. The rates of cost-sharing in a county or state are to be the minimum required to result in substantially increased performance of needed soil and water conservation practices within the limits prescribed in the national program.

6. The purpose of the program is to help achieve additional conservation on land now in agricultural production rather than to bring more land into agricultural production. The program is not applicable to the development of new or additional farmland as a result of drainage. Such of the available funds that cannot be wisely utilized for this purpose will be returned to the public treasury.

7. If the federal government shares the cost of the initial application of soil and water conservation practices which farmers and ranchers otherwise would not perform but which are essential to sound soil and water conservation, the farmers and ranchers should assume responsibility for the upkeep and maintenance of those practices through their life span. The state and county programs shall specify the life span of eligible practices.

You may well ask, why is the federal

(Continued on page 48)



Dr. Reuben G. Gustavson, president of Resources for the Future

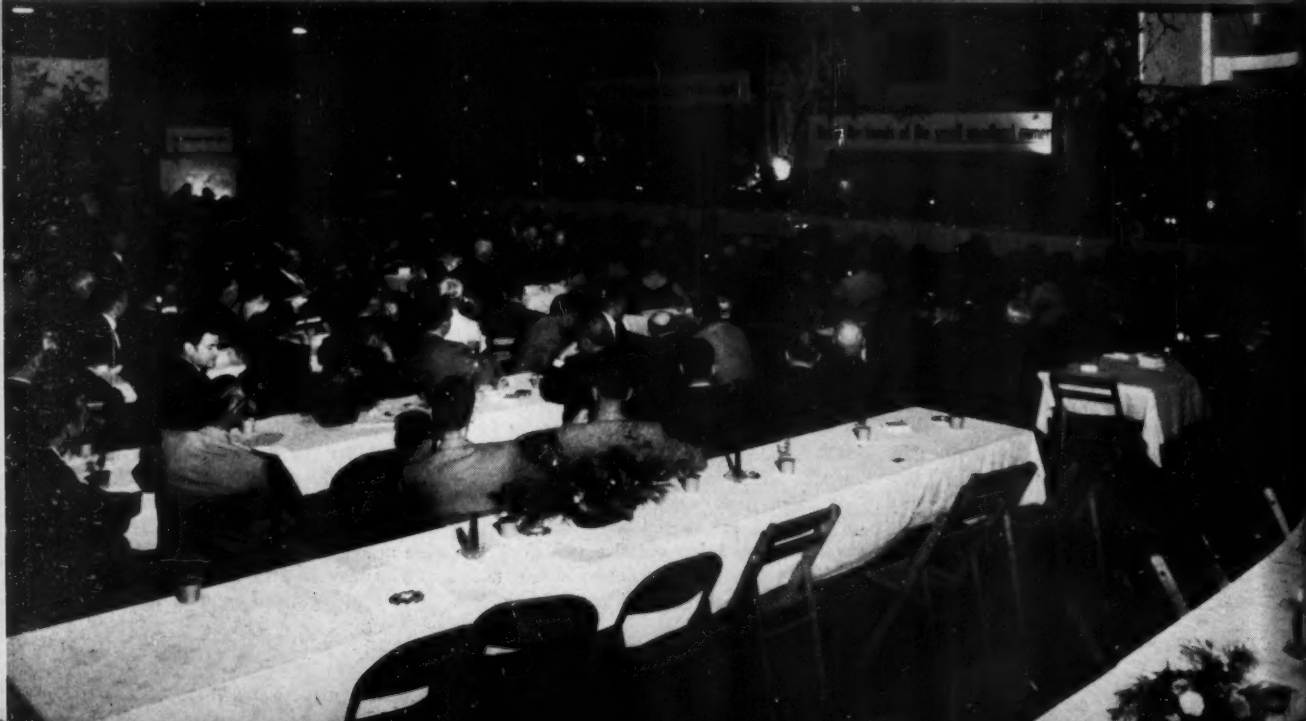
IF A SPEECH (or prayer) is no better than what people get out of it, then the joint honors for the two outstanding inspirational statements at the La Plata, Maryland, meeting must go to a Jesuit priest and the president of a national foundation.

The Jesuit priest is the Rev. Niell Gargan, pastor of The Sacred Heart, in La Plata. His invocation prayer, "Tongues in Trees," opened the 81st Annual Meeting and is published on the editorial page of this issue. President Don P. Johnston, of AFA, called Rev. Gargan's prayer "one of the most beautiful and uplifting statements" he had ever heard.

The foundation president is Dr. Reuben G. Gustavson, president of the Resources for the Future, Inc., of Washington, a subsidiary of the Ford Foundation, and former president of the University of Nebraska. His address, as it turned out, meant many things to different people; but the statement of this specialist in atomic energy and the whole field of science had one thing in common with the prayer of Rev. Gargan. Both held out great hope to people everywhere in this era of "fallouts"

"Tools for Tomorrow"

Inspiring speeches and southern cooking combined to make AFA's annual banquet a memorable occasion



and "death-dealing atomic particles," providing we can "translate the fact that life is worthwhile into our own great programs."

That the world today needs a big dose of hope and reassurance was nowhere more apparent than in La Plata, a village of 1200 people, in the wake of the statements by the Rev. Gargan and President Gustavson. Many delegates saw Dr. Gustavson's statement as the perfect springboard for launching AFA's North American Research Congress next year on "Utilization Today and Tomorrow." But perhaps a customer in a La Plata barbershop who had heard the talk summed it up as well as anyone when he announced that what Dr. Gustavson was saying was "simply the Golden Rule, that whether it's science, forestry, or just plain living, people have got to be neighborly and 'do unto others as you would have them do unto you'."

"The great story of man is to know his environment," Dr. Gustavson said. "Where are we now in the pursuit of this task? What have we learned most recently? In the biological sciences? In the social sci-

ences? The realm of the spirit? The realm of the humanities? Why should we ask ourselves where we are now? For the reason, that from our most recent advances, we are going to find the tools to solve the problems baffling us today.

"In the field of atomic energy, we have learned how to convert certain kinds of matter into energy. A professor pointed up to the sky and showed us a star. We put our eye to the eyepiece of the telescope and were amazed to see, not one star, but apparently hundreds of stars. We have counted 100,000. There are probably over a million stars larger than ours. We have learned of the origin of that energy in the last 15 years. There never will be poverty in the field of energy.

"In life, nature always puts things together in one way. She builds muscles and always puts the same units together in the same way. Never puts cat muscles on rats or monkey muscles on man.

"In biology, what have we learned in terms of heredity? We have learned to modify genetic strains. We can grow better wheat through

application of genetics, but eventually you reach a limit here. By applying ions of radiation we can get increased yields.

"In the social sciences we have made big discoveries. Perhaps the greatest in this field is the principle of the divided risk. That is the principle of insuring the many through such organizations as the Community Chest, or the United Nations. It is the principle by which many may say we will share the risk together so that no one individual must carry it alone. You people are thinking of forest insurance; you

Governor of Ohio, the Honorable Frank J. Lausche, was an AFA Award winner.



Luther S. Hartley of the Baltimore and Ohio Railroad was master of ceremonies.



County Agent P. D. Brown (left) and Maryland's Earl Poorbaugh

Unbeknown to members of AFA's Maryland convention committee, Governor T. R. McKeldin for 12 months has been quietly watching the fine spirit of cooperation that developed between foresters working on the project and the office of P. D. Brown, county agent in Charles County. In addition to pushing a forestry contest for southern Maryland boys and girls and adults alike, Mr. Brown threw his whole support to the AFA convention. The same was true of Mrs. P. D. Brown. When the time came for the annual banquet of the convention, Earl Poorbaugh, Director of Information in Maryland, said the governor—who gave the delegates a warm personal welcome to the state—would like to ask a favor. That was to present a Certificate of Appreciation in behalf of the state and signed by the governor to County Agent Brown. The certificate, on which the Great Seal of Maryland was imprinted, lauded Mr. Brown for 30 years of service to agricultural development in Charles County and for his work in helping to make the AFA convention a success. "Shucks," said Mr. Brown, "What do you know about that? But it's mighty nice all the same."

CHARLES COUNTY FORESTRY AWARDS



Chairman James C. Mitchell, third from right, Charles County Forestry Board

Seventy-four percent of all seedlings planted in five southern Maryland counties last year were planted in Charles County. One reason is the group shown above—winners of the 1956 Forestry Contest promoted by the County Extension Service, the Vocational Agriculture Departments, Charles County Soil Conservation District, and the Department of Forests and Parks. Awards were made by James C. Mitchell, chairman, Charles County Forestry Board (center). Star attraction was five-year-old Bernie Torreyson (on table) who planted a 10-acre plot. Top winners were: Junior Division, \$50—Calvin Compton, Jr.; Senior Division, \$50—Leonard Keller. Other winners shown are Jimmy Morgan, James Higgs, John Gottlieb, Emil Niessen, and J. Edward Burroughs. Directly behind Bernie is his pop, Bernard G. Torreyson.

are applying one of the principles of science:

"In certain tribes it is felt that when ill there is only one thing to do, and that is to die. We highly intellectual individuals say this is unscientific. When a rat is confined with no chance to escape, he dies within a week. But if he is allowed to struggle and then escape, is caught again, he now sees that the fight to

survive is not hopeless. He doesn't have to die. That is the will to live.

"In the humanities—what progress have we made? Galileo, in 1592, gave us physics. Mendel gave us genetics. They would be lost in a modern day classroom. But suppose we called Moses back and had him talk to a class of labor relations students. Or suppose Isaiah, Jeremiah or Amos were called back to talk to our

modern classes. Aristotle, Socrates, Emerson. They could take it all in, and lead the discussion with distinction.

"Man has learned very early of the basic relationship between man and man. Our problem today is to interpret these simpler processes into the complex civilization of which we are a part. We see in atomic energy new tools for understanding many things. We see new opportunities of spreading the risk of catastrophe so individuals will be hurt the least. Life is worthwhile — translate that into your great programs."

Making his first appearance before the membership as chairman of the Awards Committee, Louis H. Wilson, Director of Information, for the National Plant Food Institute, gave the moving ceremony great dignity. Members of the Board of Directors said they were greatly impressed by a presentation ceremony that compared favorably with the presentation of degrees by Ivy League colleges. As reported elsewhere in this issue, the awards were conferred on Paul DeLeon Sanders, editor of the *Southern Planter*, of Richmond, Virginia; Herman Haupt Chapman, Harriman professor emeritus of forest management, School of Forestry, Yale University; Gustave P. Bachman, executive secretary, Salt Lake City Chamber of Commerce; George Harris Collingwood, Legislative Reference Service, Library of Congress; and Frank J. Lausche, Governor of Ohio.

In acknowledging the award, Governor Lausche said:

I AM DEEPLY grateful for the honor which came to me tonight. The seeds sown over the years have a way of coming back to you.

I have a book "A Survey of the State Forestry Administration in Ohio." The initiation of this report had its beginning with The American Forestry Association. In the introduction of the book there is a paragraph, the substance of which I will read to you; but there are a few thoughts I want to interpolate so as to give the background of my entry into the program of conserving natural resources. The paragraph should read this way: "Through the urging of Mr. Alderman, state forester of Ohio, William Laybourne, director of the Ohio Forestry Association, and others, and through the solicitation of the Ohio Forestry Association, and in a measure through the recommendations of Frank J. Lausche as a citizen and as a public official dealing with some of the failings in the state of

(Continued on page 63)



Awards winners (l. to r.) George H. Collingwood, Herman H. Chapman, Gov. Frank J. Lausche, Awards Chairman L. H. Wilson, Gustave P. Bachman, Paul D. Sanders.



Some of the 500 participants of meeting shown on tour of Jerry Kubik dam.

3rd National Watershed Congress

By H. G. WILM

THIS year the National Watershed Congress was held at Lincoln, Nebraska, which has become a major focal point of small-watershed development activities. Aside from the attractiveness of Lincoln and its people, this location made it possible to show the participants the watershed improvements and flood prevention work that have been accomplished and are planned for the watersheds of the Salt and Wahoo Creeks above Lincoln.

The congress was strikingly well attended, with approximately 500 participants from many sections of the United States and a variety of professional interests. In contrast to the first two congresses, this year a number of foresters were present—enough so that one of the numerous agricultural conservationists commented in a friendly and joking way about the “infiltration by foresters!” These men included not only a number of representatives of public agencies, especially the Forest Service, but also at least one state forester was present and a distinguished representative of large private forest industry.

For the particular sake of the foresters, it was somewhat to be regretted that the congress had to be held in the prairie states. Forests and trees were in little evidence,

(Continued on page 44)

Interstate Commission on the Potomac River Basin

CONSERVATION of recreation and wildlife assets featured the fall meeting of the Interstate Commission on the Potomac River Basin at Oakland, Maryland. Attended by 100 persons from the four basin states and the District of Columbia, the conference led off with a vigorous and forthright keynote address by Ernest F. Swift, executive director of the National Wildlife Federation. (This address will be printed in full in a forthcoming commission news letter.)

Reports on state recreation and wildlife programs were presented by Maurice Goddard for Pennsylvania, Joseph F. Kaylor for Maryland, and Carl Johnson for West Virginia. All speakers stressed the urgent pressures on existing park and forest areas, and the steps being taken or planned to anticipate the even greater pressures now in sight. Carl Johnson urged federal and state acquisition of rough mountain lands of low quality for timber production, but eminently suited for both watershed protection and extensive and intensive recreation under stable permanent ownership.

A 3-man panel representing conservation, regional planning, and engineering interests, moderated by Edward A. Ackerman, director, Water Resources Program, Resources For The Future, considered how to adjust river-engineering development plans to safeguard land and water areas which should be preserved in a natural state for hunting, fishing, and other compatible forms of outdoor pursuits. Elting Arnold, speaking on behalf of the Potomac Valley Conservation and Recreation Council, urged the maintenance of the C&O Canal strip for simple recreation, citing its historical value, its heavy use by pedestrians, and its opportunities for nature appreciation. He also cited the growing interest in the Cacapon River of West Virginia as a wild-land waterway strip available for canoe-camping, fishing, and other primitive recreation. Paul Watt of the National Capital Regional Planning Council described the efforts to build long-range plans based on harmonizing all possible foreseeable needs for resources, including park and play space. Eugene Weber, representing the Corps of Engineers, outlined the difficulties of comparing dollar and non-dollar values as a basis for deciding on the feasibility of river-development proposals.

Past years' activities of the Commission's Recreation and Wildlife Committee, reported on by Chairman Bernard Frank, included the initiation of a cooperative survey to establish criteria and acreages for various types of land and water facilities, and completion of *Potomac Playlands*, a detailed inventory of recreational assets within the basin. The report recommended that the commission seek additional funds to employ a specialist on this aspect of the over-all planning and development program to better assure effective and timely coordination with the other elements. A closely related recommendation was that, as a more immediate step, the commission request the state and federal governments to designate qualified representatives to assist the commission in determining future needs for recreation and wildlife areas and the means for satisfying them.

Other highlights of the conference included a peppy luncheon talk by Helmuth Heise, president of the Deep Creek and Garrett County Development Association, showing of the Maryland Game and Inland Fish Commission's prize-winning movie “The Black Duck Story,” and a tour of Deep Creek and Savage River Reservoirs and Swallow Falls State Forest as examples of facilities which the Potomac Basin can provide.

by Bernard Frank

How Tillamook salvage logger

...UPS OUTPUT

..repowering with Planet-Power-steered TD-24's!

Most of the easy logging has been done—most of the best timber taken out—on the 6,000-acre Tillamook burn area that Richard Schmitz, Tillamook, Oregon, is relogging.

Yet, despite the large amount of road-building and snag-cutting required—and the tree-farming operations to do—the Schmitz "show" is logging one million feet of Douglas fir per month!

Repowers—production doubles!

Here's how Dick Schmitz, himself, tells what's happened since repowering with

International TD-24 crawlers:

"All we did was double our output when we replaced other power with our first TD-24 last year! We were averaging 4 truck loads daily—never over 5. The TD-24 jumped this to 8 every day—often to 10, using the same crew.


"Even breaking production records, the TD-24 is our easiest-operating tractor ever. Planet-Power steering with full-time live power on both tracks simplifies the work.

"The TD-24 can pull as big loads uphill as other tractors haul on level ground!"

It's no fluke, no accident, no exception for an International TD-24 crawler to beat anything else on tracks by amazing margins!

Believe your eyes—watch TD-24's at work, and compare. Believe your ears—brother loggers will talk (even brag!). Believe your finger-tips—prove exclusive Planet-Power steering and other big

TD-24 advantages to yourself. See your nearby International Construction Equipment Distributor for a Demonstration.



◀ The new Carco winch-equipped Torque-Converter TD-24 owned by Richard Schmitz approaches a landing skidding a 6,500 bf load. "The first TD-24 with 900 hours of tough mountain logging behind it hasn't had repair of any kind," reports Mr. Schmitz. "Our new TD-24 with torque drive is even better to operate—it's smoother, handles bigger loads."

100%



"You can't compare road-building by TD-24 with any other equipment," declares Mr. Schmitz. "Place the track next to the slope into low range speed,

and the TD-24 practically builds the road without much operator attention." Here his TD-24's are roughing out a new haul road.



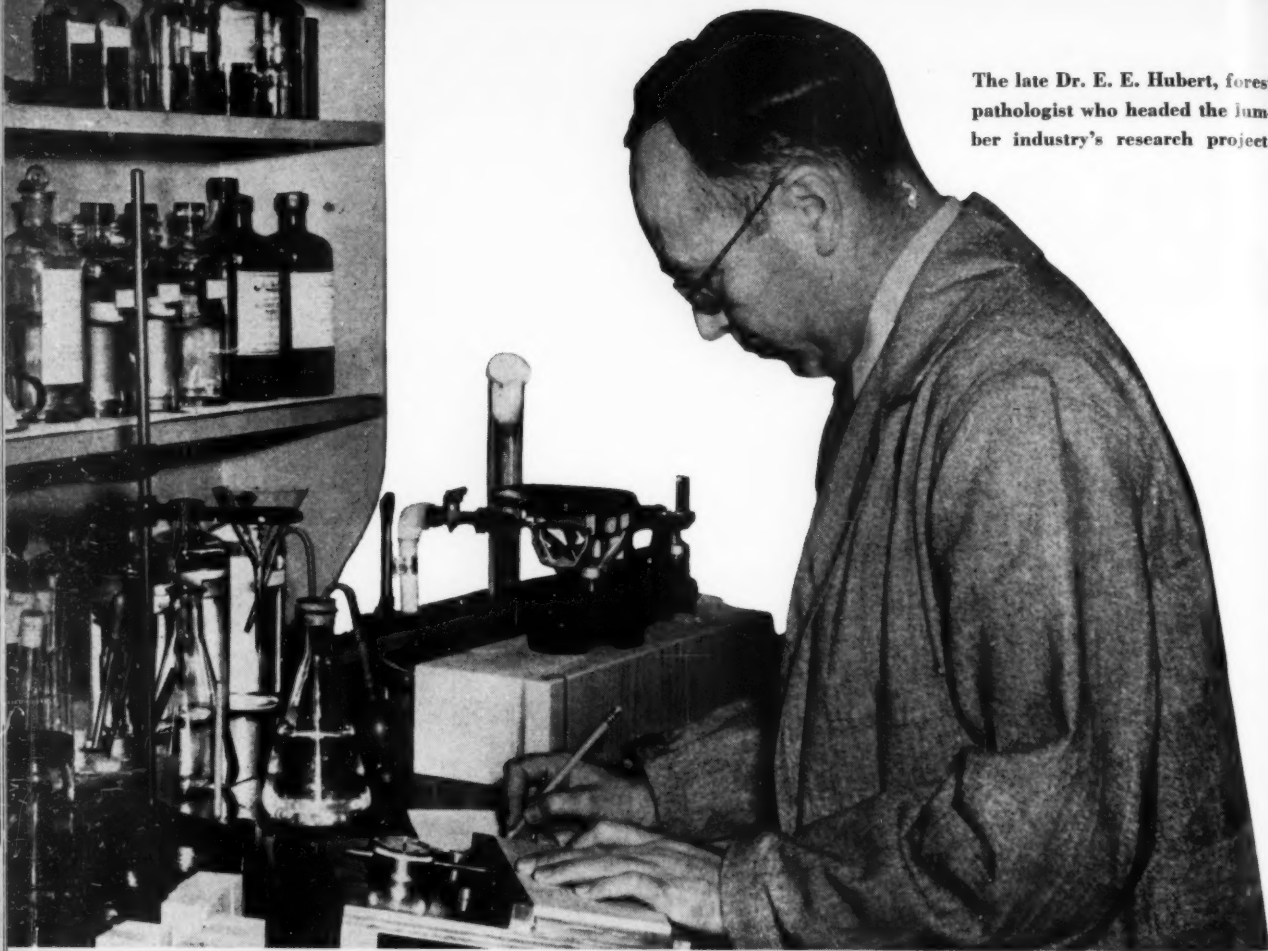
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A COMPLETE POWER PACKAGE INCLUDING: Crawler, Wheel, and Pipe-Bum Tractors . . . Self-Propelled Scrapers and Bottom-Dumps . . . Crawler and Rubber-Tired Loaders . . . Off-Highway Trucks . . . Diesel and Gasoline Engines . . . Motor Trucks



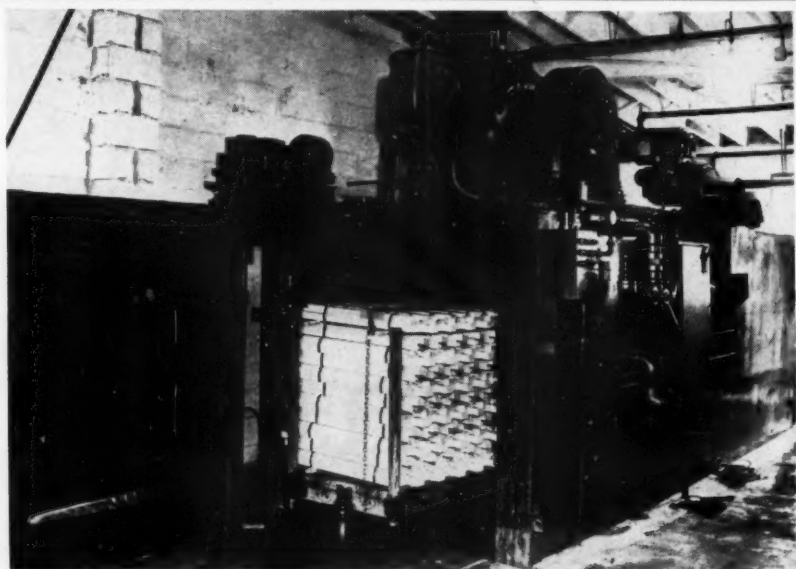
The late Dr. E. E. Hubert, forest pathologist who headed the lumber industry's research project.



PENTA COMES OF AGE

By HAROLD OLSON

Science continues to discover new uses for this "wonder drug" of the woodworking industries, which is increasing the service life of forest products three and four times.



This vacuum wood treating machine, loaded with "knocked down" window frames, can accommodate siding, paneling and other lumber up to 16 feet in length.

ON a shelf of chemicals at the Western Pine Association's research laboratory in Portland there reposes a small, amber-tinted flask containing some grayish-white crystals. These are leftovers from three ounces of an almost forgotten chemical with which a lumber industry research technologist 20 years ago touched off a new wood preserving age.

The crystals are pentachlorophenol, or "Penta." This remarkable chemical, discovered in 1841, kicked around aimlessly for nearly a century before the Western Pine lab turned the spotlight on it as a powerful elixir for wood, capable of working the magic of long service life on a host of products. Less than two experimental ounces from the glass flask might be said to have been the extent of pentachlorophenol's use in 1935-36 as a wood preservative; by 1955 this had grown to about 10,000,000 pounds.

Penta today is protecting 80,000,000 windows and sash in American homes, millions of feet of other millwork, bridge timbers and lumber poles, posts and various other forest products. The annual volume of its use has multiplied at least four times just since 1950 and continues to increase. Last year it went up 18 percent over 1954. On its 20th anniversary this year as a wood preservative, Penta continues to perform exactly as lumber industry research reported it would—an implacable enemy of decay fungi and wood boring insects.

The swift rise of the chemical as a preservative had its genesis in 1935 when the Western Pine Association set up a special research project to develop nationwide standards for millwork. Ponderosa pine from the western pine region had taken first place as millwork lumber, and the industry sought to nail down the top spot permanently.

What was wanted was long-life protection for windows and sash, doors, exterior frames, porch columns and like items. Windows and sash that would last 50 or 100 years or more, or as long as any part of a permanent type of building, was the goal. To achieve that objective, nature's agents of stain and decay had to be mastered.

The late Dr. E. E. Hubert was employed to head the research project. His task was to find the most practical preservative, both as to material cost and simplicity of treatment, and one that was colorless,

leaving the wood as paintable as before. It must have no unpleasant odor, nor could it be corrosive to nails or toxic to humans. It should be soluble in some light carrier that could penetrate readily into the woods and evaporate as readily afterwards, leaving the preservative locked in the wood and the wood as clean and bright as ever. It must be toxic to wood boring insects as well as organisms of decay.

Quite an order, indeed, that the Western Pine Lumber Industry entrusted to Dr. Hubert. He had been hired from the University of Idaho, where he had attained prominence as a forest pathologist and dean of the college of forestry.

Ensnconed in a specially prepared scientific workshop at the old Western Pine lab, Dr. Hubert's first move was to assemble from all parts of the United States samples of woodwork decay so he could put the finger on principal organisms doing the dirty work. He found that a leading culprit was *Lenzites trabea*. In tests to follow, he used this fungus in pure cultures.

Dr. Hubert then combed the nation for toxic chemicals to try out on these silent, invisible enemies of wood. He got hold of 25 or so. One of them was the three-ounce bottle of pentachlorophenol, which came from the Eastman laboratories.

done elsewhere on Penta as a wood preservative, but the chemical had been sidetracked because of what was deemed a vital drawback—virtual insolubility in water. Earlier researchers had reasoned that a toxicant had to possess some water solubility; else it wouldn't be poisonous to fungi. Dr. Hubert had a hunch this very characteristic of Penta might prove the key to its success as a wood preservative.

And so it proved. Dr. Hubert ran close to 1,000 tests in all, and Penta stood out above all others.

"Of nine toxicants showing up best in the tests," he wrote in his research notes published September 1, 1936, "pentachlorophenol appears the most suitable for commercial use, due to high toxicity, mild odor, clean appearance and low cost."

Several different light oil solvents, with Penta at varying strengths, were worked out and Western Pine gave the name "Permatol" to all of them. The name was registered with the U. S. Patent Office, but the formulas and treating methods were released for general use without royalty or restrictions. This was a decision of some importance to the U. S. lumber industry. Obviously the discovery held a trade advantage potential for Western Pine.

It didn't take the chemical industry long to get Penta into produc-



Birthplace of the Permatol formulas, this 20-year old scene from Western Pine research laboratory shows the late Dr. Hubert at work on the project.

Penta had been reported to have some potential as a wood preservative. It was an old but little-used chemical, discovered by the German chemist Erdmann while working on indigo for dyes nearly a century before. A compound of chlorine and that old reliable of grandma's medicine chest—carbolic acid—it carried a strong purifying pedigree.

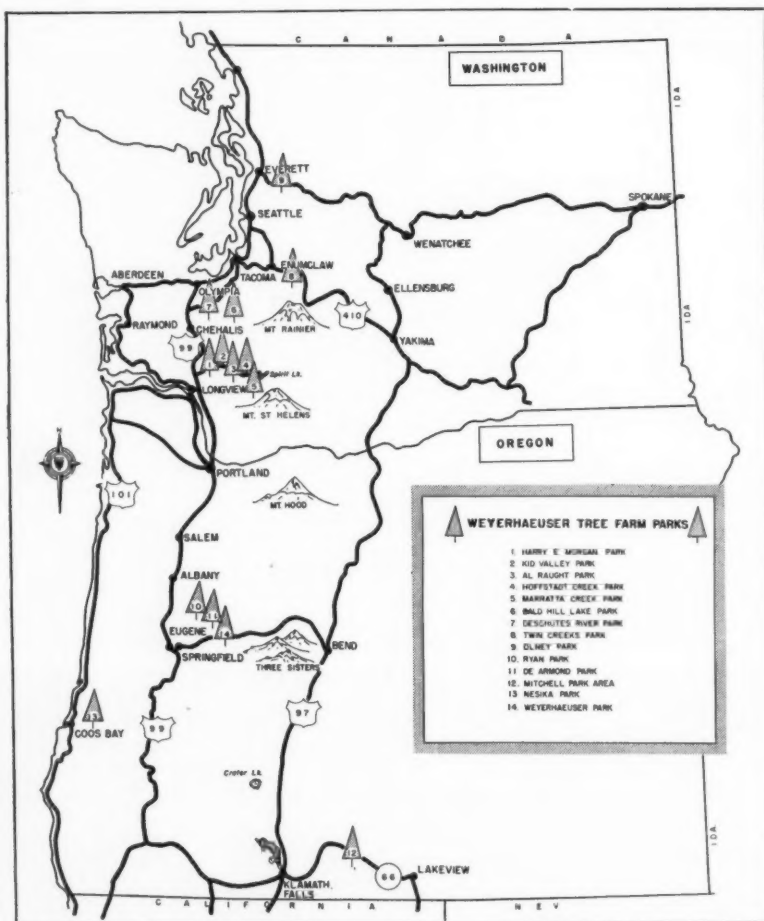
Some exploratory work had been

tion. Within a few months, millwork factories on the upper Mississippi began treating window sash and other units with it. Two years after Permatol was unveiled, 10 percent of all millwork production tabulated by the National Woodwork Manufacturers Association was treated with it. Today, 85 percent is treated. Of 13,300,000 window

(Continued on page 46)

IT WAS NEWS LAST MONTH

PUBLIC PARKS ON PRIVATE PROPERTY



"The forest industry's tree farm recreation program has come of age," said Frederick Billings, Public Recreation Administrator, Weyerhaeuser Timber Company, in an address to the National Conference on State Parks. In explaining Weyerhaeuser's development of tree farm recreation areas Mr. Billings continued, "The use of my company's land for timber production, which involves watershed and soil protection as well, must come first, then, with recreational uses of this land following up in a strong second place."

The Weyerhaeuser Company's first recognized public park was opened in 1941, Mr. Billings said.

"Hunting and fishing privileges had been granted to local sportsmen in our forest areas before this time, but the idea of maintaining a scenic recreational area and providing basic park facilities did not come until shortly before World War II.

"The number of our parks has steadily increased since that time until now, some 15 years later, we have 14 parks in Washington and Oregon. . . The 14 parks we maintain for tourists provide picnic tables, piped water, restrooms, stone and cement fireplaces, free firewood, as well as receptacles for trash. Swimming and fishing are available at 12 of the parks and

overnight camping is permitted at all of them."

Mr. Billings cited the Weyerhaeuser Company's recreation policy: "Recreational opportunities shall be offered to the public through the use of designated tree farm areas for campers, hunters, fishermen, and other recreationists. . . . Whenever possible, sites of historic interest or outstanding scenic beauty shall be preserved for public enjoyment. The company shall cooperate with groups interested in promoting recreational use of forest land in developing programs for the proper use of designated areas. Extending to the public the privileges of use of company lands for recreational purposes will help to achieve a better understanding and appreciation of the benefits to be derived from sound forestry management of privately owned timber lands."

FOREST GENETICS PROGRAM TO IMPROVE SOUTH'S WOODLANDS

The School of Forestry at North Carolina State College has begun a five-year regional program in forest genetics aimed at improving the South's vast woodlands.

In announcing the program, Dr. Richard J. Preston, dean of the college's School of Forestry, said 11 pulp and paper companies and the Agricultural Experiment Station at State College have joined the School of Forestry in the project, which is known as the Cooperative Forest Tree Improvement Program.

Dr. Bruce J. Zobel, whom Dean Preston described as "one of the nation's top geneticists," has been appointed to head the project.

FOREST ECONOMIST DISPUTES TRR FORECASTS

Mr. A. Z. Nelson, economist for the National Lumber Manufacturers Association, warned that "timber famine forecasts of the U. S. Forest Service could lead to government dictatorship of the nation's forest reserves." Nelson chal-

lenged the agency's position that "forest management . . . appears unequal to providing a balance between cut and growth at the year 2000." Actually, he said, the TRR statistics show that "nation-wide, an abundance of wood material is now available and will be in the future."

Nelson, addressing an annual meeting of the Western Pine Association, said predictions of an eventual timber shortage have been made by the Forest Service and others over a period of nearly 50 years.

"While these forecasts have proved as thin as the homeopathic soup that was made by boiling the shadow of a pigeon that had starved to death, there is danger that such gloomy statements may discourage consumer use of forest products and set the stage for unwarranted or undesirable legislation or forestry programs," he asserted.

The NLMA representative said the Forest Service forecasts also might: (1) lead to the subsidized retirement of millions of acres of cropland to forest cover; (2) encourage some forest products manufacturers to over-expand their productive capacity; and (3) encourage world trade in timber products with Communist nations while discouraging trade with the U. S.

N. C. FORESTERS TAKE TRR TO THE PEOPLE

The North Carolina Forestry Association announced plans for a team of three foresters to take the findings of the Timber Resource Review to the people of North Carolina.

Howard J. Doyle, Council Forester with the Furniture, Plywood and Veneer Council of the association will team up with the U. S. Forest Service representatives from Asheville: **Bob Larson**, forest economist with the Southeastern Forest Experiment Station and **Hans Raum**, assistant supervisor for North Carolina National Forests.

In a series of three meetings sponsored by the North Carolina Forestry Association and the U. S. Forest Service, they will present the findings of the three-year study of the forest situation and the prediction of future demands based on present gross national product and population trends.

WHAT IS A "BUBBLE-CUFFER?"

The definition of "bubble-cuffer," one who birls or rolls in a log birling game, and other words peculiar to the lumberjack language, have been preserved for posterity in a book, **LOGGER'S WORDS OF YESTERYEARS** by **L. G. Sorden** and **Isabel J. Ebert**.

Mr. Sorden began his collection of logging terms more than 25 years ago, when Wisconsin had just about seen the end of big-scale logging. The lore of early logging was fast disappearing, and Mr. Sorden decided to try to preserve it. He spent hundreds of hours talking with old loggers, rumaging through old logging camps and reading manuscripts, collecting more than 1200 terms. The glossary is limited to those terms used in the Great Lakes area, although some words were used in all of the regions.

The booklet may be obtained from Mr. L. G. Sorden, 212 North Allen Street, Madison, Wisconsin, for fifty cents.

ELWOOD L. DEMMON RETIRES FROM FOREST SERVICE



Mr. Demmon, who is retiring on October 31, after 31 years with the Forest Service, has been an outstanding leader in forestry work. He is a fellow of the Society of American Foresters, and served as its president for two years. He is also a fellow of the American Association for the Advancement of Science, and has served as a director of The American Forestry Association, as president of the New Orleans Academy of Science,

and as a member of a special committee on natural resources for the National Research Council. He received the distinguished alumni service award from the University of Michigan in 1954, and a distinguished service award from the Secretary of Agriculture in 1956.

First employed at the Southern Experiment Station at New Orleans in 1925, Mr. Demmon became its director three years later. Between 1944 and 1951, he was director of the Lake States Experiment Station at St. Paul, Minnesota.

Mr. Pechanec, who succeeds Mr. Demmon, has been with the Forest Service since 1933. For several years he had charge of the range research program, which the Forest Service conducts in cooperation with the Agriculture Research Service at the U. S. Sheep Experiment Station, Dubois, Idaho. In 1945, he headed up livestock and big game range research work for the Forest Service in Washington and Oregon. He has been in his present position since 1953.

Mr. Pechanec was one of the founders and the first president of the American Society of Range Management.

FOREST SERVICE TRANSFERS KEY PERSONNEL

Arthur W. Greeley, regional forester in Alaska since 1953, will become regional forester for the North Central Region of the Forest Service at Milwaukee, Wisconsin, the end of October, it was announced last month. He will succeed **H. Dean Cochran**, who is retiring after 36 years with the Forest Service.

Mr. Greeley was first employed by the Forest Service in 1935 as junior forester in Idaho. He later served as a ranger, timber sale assistant, assistant supervisor, and supervisor in Montana, Idaho, and northern California. He was also a timber management assistant in the office of the Chief Forester at Washington, D. C., and as assistant to the director of the Pacific Northwest Forest and Range Experiment Station in Portland, Oregon.

Percy D. Hanson, now regional forester for the Northern Region, will transfer to Juneau, Alaska, and **Charles L. Tebbe**, regional forester for the Eastern Region since

1952, will succeed Mr. Hanson at Missoula, Montana.

Joseph F. Pechanec, chief of Range Management Research for the Forest Service has been promoted to director of the Southeastern Forest and Range Experiment Station at Asheville, North Carolina, succeeding **Elwood L. Demmon**, director there since 1951.

FEDERAL FORESTRY CORPORATION PROPOSED BY OREGON GROUP

Several Oregon members of AFA have sent *AMERICAN FORESTS* clippings from the September 23 issue of the *Portland Oregonian*, outlining a proposal for a Federal Forestry Corporation.

The proposal emanated from the Business Executives Research Committee, a group of Portland business men and college faculty members, as a result of their studies of Oregon's forest resources and forest industries.

According to the article in the *OREGONIAN*, the committee made the following recommendations: "Management of all federally-owned forest land should be consolidated under a single administrative body designed to improve the over-all management and make sale policy and procedure uniform. This could be accomplished if Congress would establish a federal forest corporation to manage all federally owned forest lands with regional branches in Oregon and other parts of the Nation. This corporation would administer all contracts involving timber sales, primary access road construction and maintenance, and would perform related functions. Like other corporations, it would be subject to corporation laws and legal responsibility."

In an editorial entitled "Federal Timber Corporation would Kill Forest Service" the *OREGONIAN* commented "that the corporation could be sued to live up to its contracts; some have charged the Forest Service and other federal agencies with 'high handedness' in dealings involving timber sales. The proposed corporation also would be free of dependence on Congress for access road appropriations; it could build roads with proceeds of current timber sales or by sale of corporation bonds to be repaid by future timber sales. . . .

"However meritorious the cor-

poration idea may be, it is bound to find much opposition. The Forest Service is looked upon by many as the preserver of America's timber resources. When it was established more than half a century ago, timber operators were interested more in stripping the country of its trees than in conserving timber for posterity. A large seg-

ment of the industry has since changed its policies and now regards timber as a crop to be replenished as it is cut."

The editorial concluded with, "One praiseworthy result might be that the Forest Service, the other agencies and Congress improve the federal timber management program under the present set-up."

FAMOUS SINGER MEETS SMOKEY BEAR



Vaughn Monroe, "The Voice of RCA Victor," met Smokey, the Fire Preventin' Bear, at a recent Advertising Council public service exhibit of the National Association of Radio and Television Broadcasters convention in Chicago. An ardent sportsman, Mr. Monroe offered his services to the state for-

esters and the Forest Service in their drive to prevent man-caused forest fires. Mr. Monroe will be featured in television trailers and radio recordings to be released as part of the nation-wide 1957 Co-operative Forest Fire Prevention Program.

AVIATION HAS BROUGHT NEW PASTURES TO NEW ZEALAND FARMERS

Agricultural aviation has opened up large tracts of land for agricultural production in New Zealand, and at the same time has revitalized that country's aviation industry.

After the Second World War, the government of New Zealand experimented in "aerial top-dressing." Obsolete bombers were used in the trial drops of fertilizer in hilly and flat country. The most important trial, in 1949, proved that pasture fertilization from the air was operationally practicable and economically sound. Scores of pilots, trained during the war years



saw a future in the new industry. Small companies were formed, often with one aircraft, and the low flying "crop duster" had come to stay.

In the first year of operation, through March 1950, seven operators flying a total of 2,137 hours, treated some 48,740 acres with fertilizer. In the year ending March 1956, 56 operators spread more than 400,000 tons of fertilizer over 3,800,000 acres, flying close to 80,000 hours. In November, one hundred aircraft will mass to spell out the letters A.I.A.

TREE GROWS OUT OF ALSYNITE CARPORT



One of the most unusual carports in the country was recently built by Paul Walker of La Jolla, California, around a 12-foot Monterey pine which projects through the carport roof. When a new wing was added to the Walker ranch-type home, located on a knoll overlooking the Pacific, the beautiful tree, nurtured since a seedling, stood in the way. Rather than move it or cut it down, the Walkers decided to fashion the added structure to fit. Alsynite translucent fibreglas panels provide cool, diffused light for the carport and encourage plant growth.

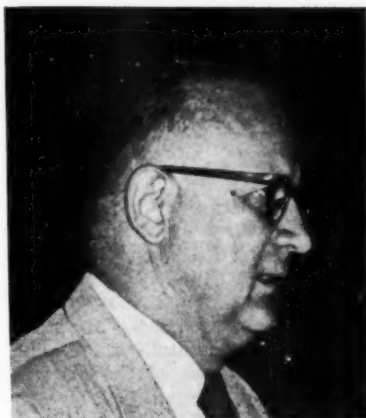
\$70,000,000 FOR NATIONAL CAPITAL PARKS

A ten-year program to enhance the beauty of the Nation's Capital and provide more adequately for the protection and enjoyment of its historic shrines was announced

by Secretary of the Interior Fred A. Seaton. The National Park Service contemplates the expenditure of approximately \$70 million on improvements to the National Capital Parks in connection with its 10-year MISSION 66 program of development and improvement of all national park areas, Secretary Seaton said.

In submitting the MISSION 66 program for the National Capital Parks System, Park Service Director Conrad Wirth pointed out that funds to get the long-needed work underway were provided in the current Department of the Interior Appropriations Act.

Director Wirth said, "All of the people of our Nation who find inspiration and satisfaction in the grandeur and beauty of our capital city will benefit from this urgently needed program to develop and improve the parks and historic shrines. Healthful recreational facilities will be expanded to serve the rapidly growing population of the metropolitan area and the millions of visitors who come to Wash-



Park Service Director Conrad Wirth

ington every year. The last quarter century has been the rapid disappearance of the undeveloped fields and forests which once surrounded the Capital City. This makes it increasingly imperative that the fullest and wisest use be made of those park areas entrusted to the care of the federal government."

GEORGIA CONSERVATION GETS BOOST FROM LADIES

If the Georgia Federation of Women's Clubs has its way, progress will be made in conservation, in that state according to the program announced by Mrs. Chester E. Martin, chairman of the Department of Natural Resources for the Georgia Federation.

Mrs. Martin and her committee have made a number of suggestions for carrying out the objectives of the Natural Resources Department. Since not all counties in Georgia have organized forest fire protection, the wild fire menace must be abated as the first step in making more forest land productive. There were 12,000 forest fires in Georgia last year, which destroyed or damaged almost 800,000 acres of timberland.

"We can no longer afford this shameful waste," Mrs. Martin said, "and the women hope to focus attention on the importance of our natural resources, and the necessity for their wise use. The forest fire problem in the South must be whipped. As much as we hate to admit it, 94% of all man-caused forest fires in the Nation are in the South each year." Mrs. Martin stressed, that in conservation education, as in many other things, the place to begin is in the home.



Mrs. Chester E. Martin

The program also emphasizes the importance of forest landowners seeking advice from foresters as to how to put their woodland in better growing condition. With the expected increase in population, the impact on the forest land in Georgia and the Nation will be terrific.

Other suggestions in the program include working with educational leaders in the field of conservation education; setting up a conservation shelf in the libraries; having Georgia towns declared as bird sanctuaries and working with youth groups.

81st Annual Meeting

(From page 13)

Free State. At this point he paid a glowing tribute to Fred Besley, first state forester of Maryland, who headed the department for 40 years and "is respected by foresters everywhere." His "big shoes" are now being filled by the equally "big feet" of Joe Kaylor, head of the department, Dr. Compton said.

The Glatfelter Pulpwood Company was host to AFA members on the third day of the Annual Meeting.

Members were driven through several of Glatfelter's holdings in Charles County, including an excellent, 35-year-old plantation of loblolly pine, before being taken to the demonstration area.

The site of the demonstration area was a 1500-acre tract of woodlands owned by Glatfelter, and incidentally the first tree farm in Maryland. Here members witnessed an interesting process called scarification, a method the company is using to rid the forest of hardwoods in its efforts to convert to loblolly pine. The trees are girdled, and then treated with a solution of sodium arsenite. This process kills the hardwoods and loosens the bark, making the trees easier to peel. The trees are treated when the sap flows, from April to July, and about three months later are ready for harvest. This scarification process also produces lighter pulpwood.

A Glatfelter forester explained the steps the company is taking to convert the forest to pine. First the trees of saw-timber size are marked, while the trees of pulpwood size are treated with the chemical solution. Tractors and discs are then used to remove the understory of hardwoods, and the pulpwood is taken off. After the area has been cleared of hardwoods, loblolly seedlings are planted. Then two or three years later the tract is weeded to free the seedlings.

A pulpwood demonstration was the next item on the agenda. Tractors skidded logs out of the forest, which were then peeled, cut to pulpwood length, and loaded on trucks.

Luncheon was served to AFA members on the shaded lawn of Old Durham Church, while organ music played softly in the background. Old Durham Church, the oldest church structure in Charles County, was built of brick laid in Flemish Bond

in 1732, replacing the original building of 1692. General William Smallwood, Chief of Staff for the Revolutionary Army, was a Vestryman of this church. The Chalice and Paten of Old Durham Church were made in London in 1707, and are the second oldest in the United States.

After luncheon, AFA members were driven through some beautiful countryside to the state's historic capital, Annapolis. A conducted tour of the State House, the oldest in continuous service in the United States, had been arranged for the members, who then walked through the quaint streets of Annapolis to the United States Naval Academy.

ISAAC TAKES FAO ASSIGNMENT

Immediately following his retirement from the Forest Service on October 1, **Leo A. Isaac**, internationally recognized authority on Douglasfir silviculture, will undertake an assignment for the Food and Agriculture Organization of the United Nations.

He will leave for a year's assignment in Turkey, under the technical assistance program, where he will advise the Turkish government on all phases of planting forest trees.

A research worker at the Pacific Northwest Forest and Range Experiment Station for the past 32 years, Mr. Isaac has received many honors for his accomplishments in the field of forest research.

Admiral Smedberg, superintendent of the Naval Academy, had invited AFA to view the weekly parade of midshipmen. The parade was indeed a spectacle, with the Brigade of Midshipmen, 3800 strong, marching on the picturesque parade grounds in spotless white uniforms with bayonets glistening in the sunlight of a lovely October day. The Drum and Bugle Corps went through its paces, as did the Naval Academy band.

Rain and mud failed to deter AFA members from the treat in store for them, a tour of Charles County's historic homes, on the last day of the Annual Meeting. In spite of a rather wilted appearance, due to the elements, the members were

graciously welcomed by the owners of these historic homes.

At La Grange, a lovely mansion built about 1763 by Dr. James Craik, surgeon-general of the Continental Army, members were greeted by the owner, Mrs. James W. Wills. After explaining the history of the mansion, Mrs. Wills delighted members with a ghost story—the lady in white who is supposed to haunt La Grange.

The next stop was Rose Hill, where Mr. Herbert Ryerson explained the extensive restoration he had just completed on this mansion, which is considered one of the finest examples of Georgian architecture in the country. Rose Hill was built in 1730, and was the home of Dr. Gustavus Brown, George Washington's family physician. The terraced garden contains enormous plantings of English boxwood, scores of years old.

Mrs. Henry V. DeMott conducted the members through Chandler's Hope, started in 1639, and is the oldest building in Charles County. Of particular interest was the original kitchen, with its six foot long fireplace and warming shelf in the back, the hand-hewn rafters, the brick-nogged walls, and the original batten doors.

At Mulberry Grove, Mrs. Edward Edelen told the group how she and her husband had painstakingly built an authentic reproduction in 1950 of the original Mulberry Grove which had burned to the ground in 1934. Colonial brick, woodwork and fanlights were collected for the house, which commands a magnificent view of Port Tobacco Valley. The original mansion was the home of John Hanson, first elected president of the Continental Congress.

Perhaps the most unusual home on the tour was Habre de Venture, now owned by Colonel and Mrs. Peter Vischer. It was the home of Thomas Stone, a signer of the Declaration of Independence, and was built in five sections in the form of a crescent, cleverly combining the three principal types of southern Maryland architecture. In the garden stands a lovely piece of statuary by the famous 15th Century German sculptor Vischer, an ancestor of the present owner.

After luncheon at Hawthorne Country Club, an 18th Century Maryland manor house, the 81st Annual Meeting of AFA adjourned.

The Place of the Small Woodland Owner in the Future of America's Timber Supply

(From page 15)

But these risks are not as great as some folks would have you believe. Perhaps you've been told that you'd better sell all your trees right away because if you don't you'll lose them to attacks by fire, insects, disease, hurricanes or something like that. I'd take a hard look at such dire predictions. Get some expert advice. Ask your state forester or state extension forester. There are state and federal programs to help you with control of fire and other damaging agents. Find out about them. Learn what you need to do yourself. All of your trees are not equally susceptible to loss by natural enemies. Some of the risks can be reduced greatly by selling the trees most susceptible to loss. Find out which ones these are. In brief, the risks aren't anywhere near as great as you may have heard, and you can do a lot to make them smaller.

One nice thing about timber growing is that forest crops aren't very perishable. If markets aren't right or if for some other reason you want to hold back, you can just let your timber values accumulate on the stump for several years until you are ready to sell.

Right here I want to make sure you understand that most of my comments about the good prospects for timber growing have a string tied to them. When I say that your prospects are good if you go into the timber-growing business, I mean that they are best if you concentrate on raising a fair proportion of high-quality trees. All the trends that I know about indicate that good-quality tree crops are not likely to be in surplus supply. But we already have some surpluses of low-quality, low-value timber. You are not going to make much money growing a crop of scrub cattle or scrub anything else. Nor would a factory owner aim at producing an inferior product. And there's no profit in producing a crop of scrub timber.

So if you want to use your forest lands for timber growing, take a hard look, a critical look, at what you have to work with. You may have a large proportion of low-value trees. These may be low-value only because they're small. Care and protection for a relatively short time may cure that situation so don't sell too soon. Your trees may be low-value because they're crooked, limby, hollow or otherwise defective. Or you may have a high percentage of species that are not readily salable. In a word, you may

have a lot of weed trees. Just having what looks like a thick stand of trees may be fine for some forest conservation purposes but may not mean much if profitable timber production is your goal.

Many small forest properties have been cut too heavily. You may not have much forest capital left to work with. With timber, as with money in the bank, at the same rate of interest you get less return on a small amount of capital than you do with a large amount. I'm afraid that many of you may have let your investment in forest capital run down to a low level. Your forests may be too sparsely stocked. Perhaps your lands could be growing four or five times more than they are. So if you want to make

expect that you aren't too much interested in whales in general. What you want to know about is your own whale.

It's at this point that you probably will need some expert advice. Each and every forest property is a law unto itself. You can learn from your neighbors and from others, but you are not going to get anywhere until you apply that knowledge to a specific property—your own. Your situation may be entirely different from the forest next door. The steps I would take on my land probably are not the steps I'd advise you to take on yours. There is no simple, easy rule of thumb that can be applied everywhere. Designing a practical plan of management for growing good timber—or any other aspect of forest conservation—requires at least as much skill, experience, and technical knowledge as does the production of any crop. You won't get the answers you need by reading a 4-page pamphlet, by looking at a 20-minute movie, or by attempting to use some rule-of-thumb guide. So don't underrate or undervalue the technical skill required to do a profitable forestry job. It's easy to make a mistake that will cut your long-time income to a third or a fourth of what you could have. You are going to have time and money tied up in this enterprise. It's your time, your land and your money. Get some good out of it.

This kind of professional-forester help is available. There isn't as much of it as there should be and you may have to wait a bit for your turn, but the situation is far more encouraging than it was a few years back. In most states your state forester can help you. If you don't have a large job, he may be able to do it for free—or at a small charge. Your state extension forester often can help. Some of the larger forest industries and forest-industry associations have foresters available to advise small landowners.

You should not expect to get a complete, full-time forest management job from these public and private foresters. They can't take over your forest property and run it for you, and I doubt if you'd expect that. But they can help you get started by sizing up your own particular situation. They can get you headed in the right direction.

Many small forest landowners do not expect to do their own woods work. Some have sizeable holdings—several hundred or occasionally several thousand acres. Your best bet often may be to employ

SECRETARY NAMED



Mr. Craig

James B. Craig, editor of *American Forests* since 1953, was elected Secretary of The American Forestry Association by the Board of Directors at its La Plata, Maryland, meeting on September 30. He succeeds Fred E. Hornaday who was named Executive Vice President of the association in July. Mr. Craig, a former Ohio and Maryland newspaperman, joined the staff of the association after serving as manager of the New York City News Bureau of American Forest Products Industries, Inc.

money growing trees, get your growing stock up to par and make your land produce more nearly to capacity.

I want to be careful not to imply that building up your forest to high-quality, high-value production is an impractical job. But I think I owe it to you to say that our surveys show only a small proportion of your forest lands to be in the upper productivity class for just such reasons as I have mentioned. I think you should know this.

I think you should know, too, that we find many forest landowners have considerably better opportunities than they have realized. Some are just not aware of their good fortune. You may be one of these lucky ones.

So your first job is to find out where you stand, what you have, what your opportunities are, what you need to do. I

a private consulting forester to plan and supervise the work for you. He will charge you a fee, but he will earn it because it's to his advantage as well as yours to make your forest land earn money for you.

You can get other kinds of help. In nearly every state, the Department of Agriculture cooperates in a program to sell you small trees at low cost to plant for timber production. Through the Agricultural Conservation Program you can get financial assistance for several kinds of forest conservation work. Through the recently enacted "Soil Bank" program you will be able to get trees and a share of the cost of planting and caring for them. In all instances, however, the controlling factor in getting this assistance is your willingness and determination to make your lands more productive.

Later, on this program you will learn more about what kinds of forest conservation help is available and where to get it. But if by any chance these many opportunities to obtain assistance should confuse you, I have a suggestion. As the agency in the U. S. Department of Agriculture responsible for forest conservation, I invite you to write to the

Forest Service. Tell us what your problem is, where your land is located and where you can be reached. We will see what can be done to help you.

My assignment today was to describe the place of the small forest owner in assuring a future supply of timber for America. I think I've probably spent more of my time telling small forest owners what to do to get their lands under management. I've done this because I want to encourage you to use your forest lands productively. This country needs timber now and will need more in the future. This timber will have to be grown as a crop. A substantial part of it will have to come from your small forest properties. But if this is to be accomplished, many of these smaller holdings must be made more productive. They can be made more productive, but it is up to you owners to do it. It is definitely to the Nation's advantage that you do so. What you small owners do with your forest lands is of tremendous importance to the forest economy of this country—more important than you may think.

It is also to your own advantage to make your forest lands continuously pro-

ductive. To do an adequate job, to get your money's worth, you may need competent technical forestry advice and guidance. In urging you not to underestimate the time, effort, and money involved, it is not my intention to over-stress the difficulties but to be honest with you so that in the end you will make the most of your time, effort, and money.

Here is a chance to do your country a good turn. You aren't just growing trees. You're growing houses and furniture and all kinds of useful articles that a growing Nation needs. You're doing more than just producing an essential raw material. Forest conservation is bigger and broader than wood production. You are helping to increase the supply of usable water, you're doing your part in helping to control floods, you're encouraging the production of wild game and creating opportunities for healthful, restful recreation and relaxation.

Here is a chance to do yourself a good turn, too. At the same time that you're helping your country you can be growing a new automobile for yourself or college educations for your children and their children. You can do it. Give it a whirl.

Small Woodland Picture As Viewed by Extension

(From page 17)

of our forest land is in the hands of small private owners. We have over a quarter-million such owners, and according to forest-ownership size our picture looks something like this:

Acres of forest land		Proportion of small owners
Range	Average	
3-50	21	65%
50-100	61	21%
100-500	169	13%
500-5000	1335	½ of 1%

This leads to a major point which we have had to consider in working with small private owners in North Carolina. At present-day prices most of us (even those on the right side of the Mason-Dixon line) would agree, that an average net stumpage income per year, before taxes, of \$10 per forest acre would indicate that the owner was doing a pretty good job of growing timber. This would certainly be true in our state, where at the present time average income per farm forest acre is somewhere between \$2 and \$3 per year. Even should timber prices increase considerably, relatively few of the small private owners in our state could maintain a reasonable living standard for themselves and their families from timber growing

alone because of the small size of timber holdings.

Practically all of our small owners are farmers. We are a small-farm state, as well as a small-forest-owner state. The majority of our farms contain less than 50 acres of land, including the woods. A large proportion of our farm people make their living raising small acreages of tobacco, which accounts for over half of our gross cash farm income. In contrast to \$10 per acre yearly income from timber, tobacco returns \$350 to \$400 per acre above all expenses, including labor. Cotton, our second-ranking crop, in good years brings in about \$90 per acre. Although our farmers can be convinced that they should make all their land work for them to best advantage, timber growing is, by necessity a secondary business to most of them.

Let's get down to the business of what we are doing in extension in our state with our small woodland owners. We have a hundred counties. In each of these is a county agent and one or more assistants—300 workers in all. Their job is to take to the farm people in their county information turned up through research and experience and show them how to apply it to increase their farming efficiency and income. These agents also work with farm boys

and girls through the 4-H Club organization.

Forestry is a part of this overall program, and our county workers are currently devoting from 3 to 4½% of their time to it.

We work with adult farmers and other small private landowners, both individually and in groups, contacting altogether about 24,000 persons a year and giving some forestry training to 25,000 4-H Club members each year. We work in close cooperation with our state forestry organization, particularly in the distribution of planting stock and in certain phases of management. We also have excellent relationships with industry. Industry buys and makes over two million tree seedlings available through our organization free to 4-H Club members, and, in some areas, to adult farmers.

Up until recently, most of our program centered around advertising forestry to small landowners. During that period we helped county agents hold from 400 to 600 group meetings per year, devoted to demonstrating such practices as planting, pulpwood thinning, sawtimber measurement and marketing, and the like. We are still engaged in such group-approach activities but to a lesser extent. It is our opinion that a

considerable number of our woodland owners now have some understanding of forestry possibilities and practices. We are, therefore, concentrating more on working out ways to remove some of the obstacles which make it difficult for them to carry out recommended activities.

For example, in southern North Carolina we have an extensive area of former longleaf pine land which is now covered in scrub oak. There is no market for this material. Pine cannot be established on such land until the oak is killed or rooted out. The job is an almost impossible one to do with hand labor, costing anywhere from \$20 to \$50 or more per acre.

Experience on our state forest indicated that a heavy-duty fireplow pulled behind a large-sized crawler tractor could be used to plow planting furrows at the rate of about an acre an hour at a cost of from \$11 to \$15 per acre. Pines planted in the furrows did very well.

We held some field demonstrations of this practice last winter. These were well attended, and a good many landowners indicated to us that they would like to convert some of this now worthless land into pine. However, they could not afford to buy the tractor and plow, by any means. We were able to get two land-clearing contractors to order these plows, and they will be providing this plowing service this winter.

In the northeastern part of our state, where the finest pine stands are located, our landowners are faced with the problem of heavy hardwood underbrush, which prevents the re-establishment of pine following cutting operations. Here, again, tackling the job by hand is both laborious and expensive. For some years two pulp companies in the area had been plowing land before cutting to eradicate the underbrush, temporarily at least, and improve germination of pine seed, with considerable success. We began holding demonstrations of this practice about a year and a half ago in cooperation with land-clearing contractors who already had two-ton, or heavier, disk harrows but had never used them for such a purpose. We now have over a dozen such contractors offering this contractual service to landowners, who are beginning to take advantage of it on a substantial scale.

One major reason why tree planting is becoming so popular with our small-owners is because it is relatively easy for them to get the job done. In thirty-five of our counties local leaders have worked to make this job even easier by buying planting machines for rental to landowners at a nominal rate. In some cases they have provided free seedlings as well.

Up to now, cost-sharing through the A. C. P. program has not been too big a factor in the carrying out of forestry practices by our small owners. But this year through the soil bank program we will have the strongest incentive yet for planting from the cost-sharing standpoint.

These are a few of the ways we have worked to make it easier for our small owners to get these hard and time-consuming jobs done more efficiently. Our major problem is to provide the follow up needed. This is time consuming but absolutely necessary, particularly where a landowner has a variety of situations and needs to carry out a sequence of different timber growing practices in order to do a good job. In many cases we have found that we can sell forestry to a small owner through our first individual or group contact with him.

"THE CONSULTANT"

A new periodical has joined the ranks of forestry publications in the United States, THE CONSULTANT, published by the Association of Consulting Foresters. It is designed to help consulting foresters in all phases of their work. The August issue, now available, contains such articles as "Let The Consultant Beware!" by Edward Stuart, Jr., "Rapid Timber Cruising" and "Point Sampling of a Basal Area."

In our state we are rapidly finding ourselves in a position where we have sold forestry to an extent to where we cannot deliver. We have yet to work out the answer to this.

These are only a few examples of some of our program efforts with small private owners in our state. In looking to the future, there are three fields of activity which we think are of prime importance and in which we hope to make a contribution to stimulate expansion of timber growing by our small owners. These are:

1. *Developing a program to reach and help small sawmill operators*—In our state sawmill operators are rugged individualists. They need and, we have found, want help in improving their production practices. We now have a man taking graduate training whom we hope to employ as a sawmill specialist. He will work exclusively with millmen, showing them how to modernize their operation, produce better lumber, utilize waste material, and the like. As a result we hope they will be stimulated to promote the improvement not only of lumber production but also timber conservation

practices as an industry. The small sawmill operator, as the man with the dollar, exerts a lot of influence on how timber is cut in our state.

2. *Developing a program to provide plant operators and landowners with local source information on market demand, price trends, new outlets, specifications, and the like*—We are lucky in having found a graduate forester who for a number of years owned and operated a substantial lumber business. He is working, first of all, to provide our landowners with practical information on existing marketing opportunities, particularly for hardwoods. He will work with buyers and producers, helping them adjust buying methods so that small woodland owners will find it easier to market sawtimber, veneer logs, and lesser-known products, and will have a clear understanding of what to expect in the way of grading, measurement, and pricing. Cooperating with buyers, he will publicize their needs for timber and raw products at regular intervals.

3. *Developing additional contractual services which will utilize mechanical equipment to make it easier and less expensive for our small forest owners to carry out needed practices*—One example of what we are thinking about is to encourage consulting foresters and others to organize timber stand improvement crews, through which they would offer contractual service in girdling or poisoning cull trees which cannot be eliminated by heavy plows or bulldozers at reasonable cost. Absentee landowners and many resident owners who are hard pressed for time and help now find it difficult to get this job done.

In closing, let me summarize in a nutshell extension's viewpoint on the small woodland picture. We are not dealing primarily with a forestry problem. We are dealing with people involved in a great variety of personal situations. Our experience has taught us that few small landowners will manage their timber holdings the way a technical forester would think they should be managed based on the condition of the woods itself. Some cannot afford to grow a long-time crop. They live from one financial emergency to another and are forced to sell trees as soon as they become merchantable regardless of the advantages of holding some or all of them.

Most of our small forest owners are going to do what they consider is best for them rather than what is best for the woods. With patience, an understanding of their viewpoint and a practical approach, we can lead a substantial number of them to make their forest acres contribute as much as possible to their success in life.

Sparks From Glowing Embers

(From page 4)

economy of the state. In hurling a pointed challenge, Mrs. Hennington said: "We women are ready to conduct our part in the fire prevention campaign. It is up to you men to provide the material and guide us in our actions."

In summarizing the Mississippi conference, the Honorable Fred D. Smith, president of the Economic Council, said "The underlying principle of law enforcement is to get the public to believe in and want law enforcement. This applies to fire prevention as well as to other problems."

An interesting sidelight of the conference was a letter received from Mrs. M. B. Hughes of Marked Tree, Arkansas. She had recently driven through rolling hills where she enjoyed the grandeur of stately trees clothed in every shade of yellow, orange, scarlet, vermilion and other autumn colors. Imagine her dismay upon returning hours later to find only blackened snags. It moved her to a poetic lament "Man Passes By," printed elsewhere in this article.

On September 25 and 26, sixty

business executives inspected northeast Florida's forest land. This tour, sponsored by the U. S. and Florida Chambers of Commerce and the Florida Bankers Association, acquainted executives with the vital importance of forest industry in the state's overall economy. Mr. A. B. Hardin, of Jacksonville, said there would be fewer forest fires if we realized how many people get their livelihood from our forests. Harold Colee, executive vice president of the Florida Chamber of Commerce, called on the assembled executives to help "find a workable fire prevention law." He warned that although "we are a great pine tree state, we are not great in conserving this valuable asset."

During the luncheon program, U. S. Representative Robert L. F. Sikes, of Crestview, Florida, pointed out that "more and more people now know that every acre of timberland yields and shows a higher profit than it did the year before."

Additional meetings are being held in North Carolina, Arkansas, West Virginia and Texas.

It is much too early to measure the results of these meetings, but some events are indicative of the far-reaching effects. For example, a visiting judge from Arkansas went home and fined the first fire setter ever convicted in his county.

The Florida Bankers Association recently paid a \$100 reward to the first forest officer to catch and secure conviction of a "fire bug." An attorney from Lamar County, Mississippi organized countywide fire protection. This is especially significant in Mississippi because each landowner must pay a tax of two cents an acre for fire protection.

Probate Judge Lloyd Hart of Conecuh County, Alabama, upon his return from New Orleans, promptly wrote an open letter to the Evergreen, Alabama, newspaper warning all fire setters what they might expect in his court henceforth.

In Georgia two more counties have been placed under organized fire protection during the past summer.

Third National Watershed Congress

(From page 31)

both on the program and on the Salt-Wahoo watershed area.

An outstanding feature of the first day's program was a morning panel discussion led by Under Secretary Clarence Davis of the Department of the Interior; Assistant Secretary Ervin Peterson of Agriculture; and Assistant Secretary George Roderick of the Department of the Army. All three were assisted by top men from their departments.

Two special characteristics were common to these presentations. One appeared last year and was repeated again this time: the expression of a sincere and active desire for cooperation among the major federal agencies engaged in watershed development and flood control activities. Progress during the past year has indicated, I think, that the three departments mean business. This year, in addition, the representatives of all three departments expressed the need for active participation by land owners and other interested individuals, private corporations and asso-

ciations, and communities. Mr. Peterson, for example, outlined the cost-sharing policy of the Department of Agriculture. Mr. Davis spoke of the President's water resources policy, and especially of its cost-sharing aspects. He expressed himself as favoring the equitable treatment of contributors to water-resource development under all legal authorities. He also commented that the federal government cannot and should not dominate water development projects. Finally, Mr. Roderick said that the Department of the Army welcomes assistance in water-control work by small-watershed groups. He made two special points: first, that no single system of flood control or flood prevention can actually exert complete control over floods. Second, he said that these balanced operations should not be turned over completely to the federal government, but should form a joint enterprise with the beneficiaries and the government working together. Each, according to Mr. Rod-

erick, should take an active part in the planning and in the cost of flood-control activities.

Parallel lines of thought were expressed by Secretary of Agriculture Benson in his luncheon speech. Among a number of excellent points, he commented on the development of the small-watershed program and on the Watershed Protection and Flood Prevention Act as amended through Public Law 1018 of 1956. Secretary Benson spoke very favorably of this act and its provisions, except for that which requires the federal government to bear all construction costs for flood prevention in watershed projects. As Secretary Benson said, "In signing the amended act, President Eisenhower referred to this provision as a 'step backwards.' And indeed it is. The President said he would recommend that this feature of the law be changed when the Congress is again in session. I concur wholeheartedly in that decision. The principle of cost-sharing on public works pro-

jects is sound . . . it is simply justice that when a man has the value of his property enhanced by a public project, he should contribute to the cost of that project."

The rest of the first day was occupied by several very interesting talks and floor discussions on flood prevention and water pollution, on range clearing and reseedling as they affect irrigation water supplies and reservoirs, and on wet land versus open water drainage. The speakers were Walter G. White, Chairman of the Water Resources Board of the State of New Hampshire; Harry F. Blaney, Research Supervisor of the Agricultural Research Service in Los Angeles, California; and Chester S. Wilson, Conservation Consultant, of Stillwater, Minnesota.

An evening discussion of the Salt-Wahoo Watershed and its problems served as an appropriate prelude to an all-day field trip conducted in air-conditioned busses over the watershed on September 19. Very well organized, this trip gave the participants an excellent picture of the land-treatment and structural works being installed in the Salt-Wahoo Watershed area to build up

watershed conditions and minimize damages from floods on agricultural land and in the city of Lincoln. Several features showed up prominently. First, excellent emphasis is being placed upon upstream land treatment in the way of contour cropping, terracing, grassed waterways, and the use of grassland in rotation with row crops. Together with the use of small dams and reservoirs, this work is beginning to build a picture of a well-controlled watershed. Second, as might be expected in a prairie state, forestry seems to occupy no place whatsoever in the upstream watershed improvement program. Belts of woody vegetation exist along the stream channels and in occasional shelter belts. But apparently these kinds of vegetation received no mention in any of the discussions, and appear to have an insignificant place in the watershed program. Similarly, no official attention was devoted to the problems of wildlife cover and wildlife management; and recreation was mentioned only incidentally, in connection with the use of "conservation pools" in the flood prevention reservoirs for waterfowl shooting

and fishing. Finally, the question of cost-sharing came up several times during the trip; especially in connection with the costs of installing the smaller and larger dams and the channel-improvement works through the city of Lincoln. As to the latter, it developed that the local direct beneficiaries from channel straightening and levees are expected to contribute only ten percent of the total cost of the project.

The first feature of the final morning of the congress was a speech by Representative Jamie L. Whitten of Mississippi, Chairman of the Subcommittee on Agricultural Appropriations of the United States Congress: "The Congressman looks at the Watershed Protection and Flood Prevention Program." Mr. Whitten made the excellent comment that agriculture and conservation are almost completely bi-partisan or even non-partisan issues, in which representatives of both parties of the Congress cooperate wholeheartedly. At the same time, he seemed to feel that the future of both agriculture and conservation would be brightened under a Democratic administration.

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As generally happens at meetings of this kind, some pronounced undertones of sentiment could be picked up in the corridors and along the road. First was an apparently rather widespread question as to the contribution which should be made by direct beneficiaries, to the costs of flood-prevention work. It would seem that this theme should be built up strongly during the coming year, leading to support for federal legislative action which would provide that beneficiaries should contribute their full share to the costs of flood-control work—including that done by the Corps of Engineers and other public agencies as well as the Department of Agriculture. Second is a feeling that forestry deserves a larger role in small-watershed programs, and several comments that the Soil Conservation Service wants to take over farm forestry programs. Such a move would seem undesirable. It would tend to disturb and perhaps disrupt

the present role of the states in their cooperative work with the federal government and with private landowners. It would seem preferable for the Soil Conservation Service to work with the Forest Service and state foresters in efforts to step up the strength of programs being conducted under existing legislation and cooperative arrangements. Finally, perhaps as a by-product of the expressed sentiments on the role of forestry in small-watershed programs, some feeling was expressed that the next Watershed Congress should be held in a section of the country where forests occupy an important role. The Southeastern hill or mountain country was suggested as a desirable area. The congress might well, for example, be held at Asheville, where the Coweeta Experimental Forest would be within easy reach. Or Memphis, where the Yazoo-Little Tallahatchie flood-control project would provide a desirable locale.

Penta Comes of Age

(From page 35)

units produced in 1955, a total of 11,305,000 was fortified with Penta for long life. A similar ratio held true for many other millwork items subject to exposure to the elements.

So nicely did the chemical perform on millwork that the pole industry soon began using it for treating poles, posts, timbers and cross-ties. This process began to snowball shortly after World War II. Last year, of 4,998,016 treated poles produced in the United States, 1,224,267 got the Penta-treatment.

Production figures for 1954 showed 35,000,000 board feet of lumber were treated with Penta. Also 2,226,000 crossarms, 53 percent of all such output. And more than 1,100,000 fence posts were Penta-treated at commercial plants. This is in addition to an estimated annual 7,000,000 posts Penta-dipped by farmers for their own use.

Today most of the major U. S. chemical companies manufacture Penta, some under their own trade names and the product can be bought in retail lumber yards, paint stores, farm supply houses and general stores all over the nation.

Dr. Hubert lived to see most of these developments. After finishing the Permatol project, he joined the staff of a leading chemical company that manufactures the product.

Dr. A. W. Stout, research chemist at the now much larger Western

Pine laboratory, said the preservative has been found to have amazing versatility. New uses are coming to light right along. Among them are control of algae growth in condenser ponds and preservation of glues, egg cartons, leather goods, paints and tanning liquors. Also, the chemical has toxic effects on such plants as poison oak, ragweed and water hyacinth.

Evidence is piling up of Penta's potency as a wood preserving agent. Not only does it stop rot fungi in their tracks, but termites, wood boring beetles and similar insects shun it like the plague. And as Dr. Hubert first reasoned and later proved, its resistance to leaching is an advantage.

O. C. Lance, secretary-manager of the National Woodwork Manufacturers Association, said Penta has "high effectiveness."

"After nearly 20 years of treating experience, the stock woodwork industry has no authenticated instance of decay in woodwork treated according to the NWMA standard," he said.

There's no assaying of Penta's full impact on America's forest products resources. Certainly tripling and quadrupling of service life of forest products has an effect similar to growing millions of feet of extra timber.

A Comment From Pennsylvania

By MAURICE K. GODDARD

*Department of Forests and Waters
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania*

IN the September 1956 issue of AMERICAN FORESTS there is a full page statement by Musser Forests, Inc., of Indiana, Pa. Although this page does not state that the item is a paid advertisement, I assume that such a signed, self-serving, and inaccurate declaration cannot be a news story. Would you kindly clarify this matter?

Musser Forests makes several gross mis-statements of fact and draws unwarranted inferences which I should like to correct. Under the Forest Tree Seedling Act of Pennsylvania, the Department of Forests and Waters is authorized to sell seedlings at cost for the purposes of reforestation and timber. The purchaser must agree not to resell such state seedlings or to use them for ornamental purposes. Investigation discloses that Musser Forests, Inc., and the individual shareholders of Musser Forests purchased over 2,000,000 state seedlings at a cost of \$11,091.00. These were resold in violation of the law and of the written agreements for in excess of \$157,000.00. The Commonwealth, as is provided under the law, has brought an action to recover three times the value of these trees.

The Commonwealth recognizes that Musser Forests, Inc., is one of the largest growers of Christmas trees and has planted many acres of forests. But this activity does not condone an unlawful use of state seedlings. Musser's cry of politics is an attempt to obscure the obvious facts.

Musser correctly stated that the Department of Agriculture moved to revoke Musser Forests' nursery certificate. After a full hearing, the Secretary of Agriculture found that Musser had been selling infested trees in violation of the Plant Pest Act and thereupon revoked its certificate. The Dauphin County Court granted a stay pending appeal, but conditioned the stay upon Musser's compliance with the Plant Pest Act.

Since I believe that the readers of the AMERICAN FORESTS are entitled to know the facts, may I request that you print this letter.

(The statement by Musser Forests, Inc., of Indiana, Pennsylvania, that appeared on page 45 of the September issue of AMERICAN FORESTS was a paid advertisement. In the judgment of the editor, this insertion did not sufficiently enlighten readers as regards both sides of a case that is now pending in the Dauphin County (Pa.) court. Accordingly, on page 61 of the same issue of AMERICAN FORESTS, in the news column entitled "What's NEWS Across the Nation" we published additional information on this case, which information was largely obtained from the office of the Attorney General of the Commonwealth of Pennsylvania. — Editor)

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Forest Practices Under the Agriculture Conservation Program

(From page 27)

government interested in entering into partnership with owners of small woodlands to promote soil, water and forest conservation practices. In answer I will say that it is the function of government to protect and conserve our natural resources. In some countries this is done by compulsion—but in this country we have attempted to accomplish our conservation objectives by education, technical assistance and by cooperation with the landowner in the form of sharing the cost of certain practices under the Agricultural Conservation Program.

In this country the acreage devoted to forests has been gradually declining until today approximately 25 percent of the land in the country is in commercial forest land. The majority of these forest lands are owned in tracts of 500 acres or less, and yet these small woodlands account for approximately 40 percent of the timber cut for all products. These owners of small woodlands need to practice the very best management possible in order to make this acreage produce to its utmost capacity of good quality timber.

Another reason why the government is interested in promoting good management on the small woodlands of this country is that timber is such an important part of the national economy. Employment in forest activities in 1952 accounted for 6 percent of the civilian labor force and 6 percent of compensation paid all employees. It also represents 5 percent of the dollar value of all materials going into our national economy. Expressed in dollars, the purchases of lumber and wood products, as well as pulp and paper products, are widely distributed in the economy and total 9 and 7/10 billion dollars annually.

The government may well be interested in protecting and conserving our resource base for manufacturing plants valued at 10 billion dollars. This figure is an estimate, to be true, but it has been arrived at in consultation with the various associations interested in forestry, as well as the U. S. Forest Service. These plants are dependent upon a continuous flow of forest products, and so it is in the national welfare to have this renewable resource in the best possible productive capacity.

It may be of interest to you to know how the annual ACP is developed. First, the Agricultural Conservation Program Service with the cooperation of the Com-

modity Stabilization Service, the Soil Conservation Service and the Forest Service, agree on the general principles governing the current year program. These are sent out to the states and then the State Agricultural Stabilization and Conservation Committee—with the cooperation of the Forest Service and the Soil Conservation Service, as well as representatives of the Land Grant College and other agricultural agencies—draw up the various practices which are applicable to the particular state. This state handbook is then submitted to Washington and when approved by the ACPs, is sent to counties where the county committee, assisted by representatives of other agencies such as the SCS and Forest Service as well as the Extension Service, develop their county program. This process of program development may seem rather cumbersome, but it combines the technical knowledge of the state and federal agencies with the grass roots thinking of farmer committees.

Let's for a moment consider what the program offers and what has been accomplished during the last six years. The forestry practices offered under the ACP are tree planting, timber stand improvement, fire-breaks to protect woodland, clearing for tree planting, and forest site preparation for natural reseeding. Then, of course, there is the Naval Stores Conservation Program in the Southeast. Generally speaking, the practices most widely adopted have been the tree planting practice, timber stand improvement, and fire-breaks to protect woodlands.

The Eastern Shore Forest Improvement Project, an outstanding program in Maryland's northeastern forestry district, is a fine example of how the county ASC committees cooperate with the foresters by paying half the cost of getting a stand of loblolly pine. Before this is possible, the undesirable hardwoods must be eliminated. This is being done in various ways, such as controlled burning, killing by chemicals, bull-dozing and scarifying. In some cases, a combination of these practices is used. To date some 300 woodland owners on Maryland's Eastern Shore have been assisted to treat around 6,000 acres. The cost will vary from \$15-\$35 per acre, depending on the method used.

Nationally forest improvement practices, during the last six years, have accounted for approximately 5 million dollars of the money spent under the ACP. I might say that the percentage of money paid out to owners of small woodlands for carrying out the forest practices is rather small, however, the trend is upward. In 1950, .39 percent of the total

amount of money paid out in ACP cost-sharing was paid to farmers for carrying out forestry practices. In 1951, it was .47 percent; in 1952, .48 percent; in 1953, .57 percent and in 1954, 1.02 percent. The cost-sharing under the Naval Stores Conservation Program is in addition. You can see that although the sum is substantial yet there is plenty of room for improvement in promoting forestry performance under the ACP.

There has been a considerable amount of promotional work done to make forestry practices under the ACP more attractive to the individual woodland owner. Mississippi, for instance, is one of

the leading states as well as New Hampshire in the Northeast.

There may be need for changes in the forestry practices to be offered under the ACP; and, of course, there is always need for improving the administration of any program. However, I think it's fair to say that the Agricultural Conservation Program offers the owners of small woodlands assistance in carrying out good management practices. And it behooves all those interested in better forestry to see that this program is known to these woodland owners and is used to an increasing extent in promoting better management on these small woodlands.



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By the Extension Forester

(From page 19)

ber this has been essentially an improve-
ment operation. At the present time the
woods are nicely stocked and in excellent
growing condition ready to produce a
good income."

A permanent growth plot in this tract
indicates a growth rate of over 200
board feet per acre per year. The stand
now contains approximately 4,000 board
feet per acre of mostly good species
such as tuliptree, oak, sweet gum, and
red maple.

In contrast to this rather low income
operation, I am reminded of a Dearborn
County farmer who made a timber sale
in 1948. He selected 31 large trees (29
white oak and 2 red oak) and sold them
to the highest bidder for \$5125.00. His
34 acre farm woods have been protected
from fire and livestock grazing since
about 1860, or almost 100 years.

I believe that one of our greatest
needs is to increase the leadership in
forestry on the county level. Our agri-
cultural leaders especially need to have
more appreciation for the problems of
the small woods owners. These leaders
include county agricultural agents, soil
conservation technicians and vocational
agricultural instructors. These leaders,
in the middle west area, should consider
the farm woods as an integral part of
the farm unit or operation. Some of
the county agents, serving in counties
having 40 percent or more land in
woods, may only report a total of 3 or 4
days used during the year on forestry
work. I believe these leaders sometimes
steer clear of the woods because of a
lack of farm forestry background. A
good remedy for such a situation might
be to strive for required farm forestry
courses for general agricultural students
at our agricultural colleges.

We in extension forestry believe that
some forestry ideas can be sold through
the most valuable crop that we have—
the youth of our nation. Our youth pro-
gram mainly involves working with 4-H,
F.F.A. groups, Boy Scouts, and school
camps. We devote about one-half of our
total time to this phase of our program.

This chart shows the growth of our
4-H Forestry Club program during the
past few years. In a ten-year period this
program has increased from a few hun-
dred members to about 7,000. Georgia
is the only state with a larger 4-H For-
estry Club enrollment.

Our youth program appears to be
more successful than our adult work; but
after all, the programs are difficult to
separate and evaluate. I am sure that we

are getting tree seedlings planted by
the 4-H club members and their parents.
Some ideas on farm woods management
trickle back to the farm woods by way
of the 4-H route.

In conclusion, I would like to recall
to your attention that nearly all of our
woods in Indiana are in private ownership
consisting of small tracts. Even though
our total timber acreage is small, our
central hardwoods are important because
of the specialty products manufactured
from them. Indiana has over 1000 saw-
mills, over 30 veneer plants, 10 cooper-
age mills, and several handle plants.
We have about 650 manufacturing plants
which use wood as their raw material.

The greatest hazard to these fine hard-
wood stands is grazing by domestic
livestock. Our leaders especially need to
become more conscious of the damage.
I hate to mention this, but we even have
a limited number of trained foresters
who believe that a little grazing in the
hardwoods is all right. The late, well-
known Prof. T. E. Shaw of Purdue, once
said that sometimes he couldn't give a
cow much credit for having intelligence
when she would stand in clover belly
deep and reach over the fence to eat
the tops from pine trees planted in a
windbreak. My favorite expression is
referring to a pastured woods as a cow
gymnasium because the animals gain
little value except for the exercise. We
have just begun to scratch the surface
as far as the grazing problem is con-
cerned.

Growth is being laid on low-quality
trees faster than we are disposing of
them. High-grade trees are being har-
vested much faster than they are being
grown. Our markets appear to be main-
ly geared to the use of high-quality ma-
terial. We need more research and in-
dustries to make use of the low-value
species in the farm woods.

There is a need for leaders to con-
sider the farm woods crop as an integral
part of the farm plan. Possibly a re-
quired course in farm forestry for gen-
eral agricultural students would pay
good future dividends.

We shouldn't forget that some ideas
can be planted in the minds of our
youth. We are making progress in this
field in a rather satisfactory manner.

A great many things have been accom-
plished on the ground in our small
woods. These small woods are also re-
ceiving considerable attention today, but
we shouldn't slacken our traces as there
is still much to be done.

By the Farm Forester

(From page 19)

desirables is discouraged. Vigor is a deciding factor whether a tree of larger diameter is cut or left standing. As long as the tree has a healthy crown and the rate of growth is maintained, these vigorous trees may be safely left to grow for the next harvest, 10 to 15 years hence.

A farmer has a greater opportunity to select the trees necessary for cutting since the question of economics is not the deciding factor. The chain saw has shortened the time necessary to cut logs or pulpwood, so many farmers are able to do their own work on winter days between barn chores. Sample markings with frequent inspections is usually all that is needed in these woodlands.

The importance of integrated logging is stressed. For example, one farmer cut timber from his sugar bush, removing beech, red maple and white birch. A market for piling has been found for beech and red maple. These piles are from 30 to 45 feet long, relatively straight and at least 12 inches in diameter breast high. The stumpage return for this product runs an average of \$32.00 per thousand board feet as against \$5.00 for logs. Therefore, this farmer has received a much higher return at roadside by being informed of such markets. Those trees not producing piles were sold as logs at roadside for the going rate. The white birch was cut and sold to three mills, as veneer, boltwood and the cull sticks for pulpwood. This practice of finding diversified markets for a farmer's products is one of the farm forester's responsibilities.

Maple syrup production is a very important crop in those states that are blessed with the sugar maple. Many farmers have a so-called sugar bush from which they can supplement their farm income by making maple syrup in the spring. In this phase of forestry, we advise him to fence his sugar bush and other woodlands to keep out the livestock. Cows have a habit of browsing on the sugar maples, ash and yellow birch, leaving the weed species such as hop-hornbeam, beech, gray birch, etc. The farmer is shown that grazing will compact the soil, making it more difficult to obtain natural regeneration, and that water runoff is more prevalent in a grazed woodlot as there is little leaf litter to act as a sponge. The importance of thinning young pole stands for future sugar bushes is stressed. In these cases, the selection of the final crop trees is explained. By use of the sugar refractometer, those young trees of high sugar

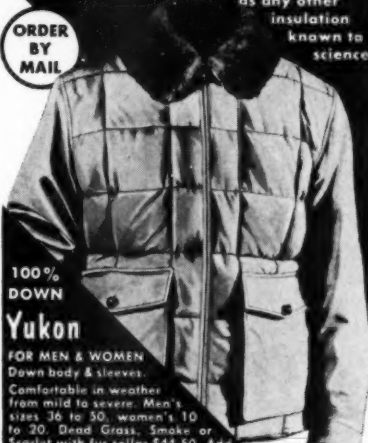
content will be marked to leave for future sap trees and the others removed for pulpwood or firewood.

Another service to the farmer is that of advising him to plant trees on areas that are no longer being farmed. The improved pasture and cropland programs have resulted in more idle acres. These should be planted before undesirable hardwood species seed in, taking over the growing spaces. The proper selection of tree seedlings and the method of planting is explained. All states have nurseries which supply the trees at cost.

Plantations in Vermont are inspected five years after planting and every 10 years thereafter. This is done to make recommendations for the treatment of these future stands of timber. Pruning of the lower limbs is begun as soon as the trees are about 10 years old, followed by subsequent prunings until a 16 foot log is cleared. Rather than pruning only the recommended 200 trees per acre, the tendency is to cut limbs from all the trees making a parklike appearance of the forest. There is no harm in doing this, but it is a waste of time and money, as 4/5 of the trees will be removed in later thinnings before the bene-

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fits of the pruning have been obtained. Markets are being developed for posts, poles, cooperage, and pulpwood from these plantations, resulting in a higher financial return from the first thinnings.

It is a different story, however, when working with the non-resident woodlot owner. The first visit consists of an attempt to find the property lines with him. This presents a real problem as nearly always the lines are old broken down wire fences or old blazed lines that have long since become quite indistinct. If we are fortunate in being able to ascertain that we are within the property lines, the complexities of the forest are explained. In many instances a tree identification course results in showing the owner the difference between the more valuable sugar maple and the less valuable red maple, or being able to identify a spruce from a balsam. A small core of wood removed from a standing tree using an increment borer is used to show these non-resident owners how slowly a tree actually grows. The rings counted in a radical inch can be compared to the interest percentage money draws in a bank. A tree drawing 1% interest would be cut while a 6% tree or better would be left for the next harvest.

In the course of traveling throughout his woodlot, notes are taken on the quality, quantity, and vigor of the tree species and what the logging conditions are. It is determined what the owner has in mind and what his woodlands need in the way of management. Reference is made to the private consulting forester who will assist him for a fee. The work load of the service forester is very heavy, making the initial calls, and as many follow-up contacts to maintain owner interest as time will permit; so, whenever possible, timber sales are referred to the private consultants. It matters not who handles the sale as long as a good job is done.

In order to get a good job done on the ground today in these small woodlots,

we give service to the sawmill owners and logging jobbers as well as to the landowner. Our first contact with some private woodland owners comes from the buyers of stumpage who are willing to cut marked timber. Very often we become the mediator between the two parties. Unfortunately, there is always the wood butcher who disregards all thought of preserving our natural resources for the future and will clearcut or high grade a woodlot for only his own personal gain.

This past year a timber sale was made in my county that will illustrate quite well the theme of this discussion.

Mrs. Richard B. Leake, Jr., of Bennington asked me if I would look over her 3 acre woodlot, as a pulpwood cutter wanted to cut the stumpage for \$10.00 MBF for logs and \$2.50 per cord for pulpwood. On examination of the lot with her, it was obvious that this old sugar bush was a saw timber lot and not a pulpwood lot. The stand consisted of large, overmature sugar maple and excellent red oak. It was also obvious that the small volume to be marked, an estimated 12 MBF, would not interest many buyers.

Adjoining the Leake lot was 6 acres of the same type of timber belonging to Fairdale Farm, Inc. A reconnaissance showed that about 13 MBF of the same species could be marked for sale.

Also adjoining these two lots was a third woodlot of 14 acres belonging to Lester Vail, with an estimated volume of 45 MBF of sugar maple, red oak, basswood, and white birch. After calling on these other two owners and explaining that by coordinating these three lots into one sale a much higher stumpage return would result, permission was granted to go ahead with the plan.

The timber was marked and shown to seven interested buyers. The sealed bids, when opened, revealed the highest offer to be \$42.75 per MBF for the sugar maple; \$32.75 for the red oak; and \$25.00 for the other incidental species. Sale contracts were drawn up between the three owners and the purchaser.

The lines between the three lots were plainly marked with red paint. One lot was cut and logs scaled before the next lot was worked. The purchaser was very much satisfied with the quality and volume of logs removed. Instead of having a small sale of 12 MBF, the final tally amounted to a volume of 75 MBF. Naturally the three owners were very much satisfied with the monies received.

So that our timber supply be protected and conserved and to safeguard the interests of the small woodlot owners, the need of the Cooperative Forest Management Program is quite evident.

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As Viewed by Industry

(From page 17)

tile raw material every conceivable product to fill the demands of a growing, prosperous and exacting population.

To solve the complex problems of wood production facing the small woodland owner and the forest industries today requires not only a lot of manpower, and a lot of brain power, but also requires the full cooperation of government, education, banking, industry and agriculture, to name just a few of the principal categories of desired contributors.

Industry today believes that the small woodland owner is well underway toward his responsibility to the nation. His timber holdings, though small on an individual basis of measurement, take on a tremendous significance when expressed as a portion of the total forest acreage in small woodland ownership in our country.

As I speak to you today, let me remind you that not only does the forester, the chemist and other related industrial scientists realize the tremendous importance of the farm woodlot to the future of America's forest industry, and to the nation's economy in general; but the industrialist, the financier, yes, and the stockholder too, knows that the continued profitable operation of the wood-using industry hinges on the continued and expanded production of the farm woodlot and the so-called small forest property. Isn't it logical then, to expect that industry will protect its own future by giving all reasonable assistance to these owners of small woodland properties in order that it might be brought into full and continuing wood production without undue delay? Actually, hasn't industry been doing this for quite a number of years in the past? Isn't it generally agreed today, by all concerned, that industry's program to improve fire protection and timber management on the small woodland is being expanded and accelerated? Hasn't industry given heavy support financially, and otherwise, to industry organized and sponsored associations, designed primarily to aid the small woodland owner? I feel that everyone here today who is familiar with the facts will readily admit that the answer to all these questions can be expressed in the affirmative. And the results being obtained from this gigantic overall industry program are most reassuring.

The American Forestry Association, of which I have been a member since the early 1930's has continually rendered great services to the small forest land-owners of the country during all of its

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long years of existence, and certainly it is at least partially sponsored by industry.

You might ask the question: Are the modern industry attitudes, programs and the sponsored associations being accepted by the small woodland owner? And are they accomplishing what they were designed to do? My answer to such questions would be: Look about you!—What do you see?—You see great expansion in all the major forest industries of this nation, with especial emphasis on pulp and paper. What are they using for raw material? Timber! And from whence does it come? The great bulk of it comes from the farm woodlot and from small forest properties of this nation. Traditionally, it has always come in great quantities from this source and in my opinion it always will.

Today, more than ever before, the forest industry of this nation must look with confidence to the ever-continuing production of wood, in maximum quantities, from the farm woodlots and small forest properties of this country. Neither the small woodland owner nor the forest industry can fail in its responsibility to the people, if we are to continue our development as a nation.

Under the free enterprise system in

our American way of life, one need have no fear of such a failure in my opinion.

I feel that I could talk for hours on end, and in great detail, about the accomplishments that have been made in bringing the small woodland property into fuller production. It doesn't take many minutes, in my estimation, to present to you industry's views on the small woodland. Industry definitely recognizes their importance, not only to industry as a source of raw material, but to the nation as a whole, for they present a tremendous economic opportunity to every landowner, industry worker and stockholder involved.

Many have cooperated wholeheartedly in this gigantic undertaking to develop this opportunity. Years and years of work lie ahead before this program can be called complete. I feel sure that industry will continue to lead the way in aiding the small woodland owner to bring his acreage into sustained production. Industry will, without question, provide the assistance and the incentive to keep it that way.

The small woodland owners and the forest industries are today cooperating to the fullest extent ever to insure that our national demand for products of wood will never suffer for lack of supply.

Fifth World Forestry Congress

(From page 6)

FAO's program of work in forestry.

Among the features of all past Congresses have been exhibits and field excursions, as well as meetings for technical discussions. The exhibits have included a wide variety of material representing the work and interests of all agencies, public and private, engaged in forestry, forest products industry, the manufacture of equipment for forestry and industry operations, and in fields allied with forestry. Besides those of the host country, there may be special international exhibits such as the one of forestry publicity material at the Fourth Congress in India. The field excursions, held as featured parts of the agenda, have provided excellent opportunities to observe examples of forest conditions, to see industry operations, and a host of other things. Field excursions have usually been organized on an alternative basis to meet the differing interests of those attending the Congress. As many as ten or twelve alternative field trips have been offered by a host country.

A number of groups have advanced reasons why it may be desirable for the United States to offer

to be host to the next World Forestry Congress. First of all, it can be said that it is time for the United States to take its turn. The first three Congresses were held in Europe; the fourth in Asia. None has been held in the western hemisphere. Secondly, this country is a leader in technological development, including many aspects of forest resource management and forest-products utilization, and is carrying a large program of technical assistance to the under-developed countries of the world. The story of American accomplishments and hospitality which perhaps as many as four hundred foreign forestry leaders would take home with them could favorably influence our relations with other countries, encourage better cooperation internationally, create good will among people whose opinions are respected, and stimulate greater interest in forestry, both at home and abroad. Thirdly, holding the Congress in the United States will afford an opportunity to show the world what we are doing in forestry, including timber management, watershed management, range management, forest recreation, wild-

life management, and forest-products utilization. We can take pride in our accomplishments and in our plans for the future. Yet we can learn from other countries as ideas and information are exchanged.

If the next (Fifth) World Forestry Congress is to be held in the United States, several steps are involved. The first would have to be taken this fall; it would consist of an expression of interest on the part of forestry and forest-industry groups in having the next Congress in the United States and a willingness to support it if our country's offer is accepted. This expression would have to be in terms that could be translated into monetary considerations as well as the willingness to contribute time and effort. In 1952 when the question was considered of offering to be host for the Fourth Congress, the Department of State estimated the total cost to be somewhat more than \$100,000 of which only a small part could be provided by the U. S. government.

The second step would be an official offer by the U. S. government to be host, to be in the hands of the Director-General of FAO by February 1, 1957, or shortly thereafter. Before an official offer is made, the U. S. FAO Interagency Committee, made up of representatives from all the government agencies concerned with FAO affairs, would determine: (1) the adequacy of interest and support among private and public forestry groups; and (2) whether it is appropriate for the U. S. government, considering all aspects of the question, to extend an offer to be host. If more than one country makes an offer, the Director-General has proposed that he would convene a meeting of a special Preparatory Committee set up by the Fourth Congress and leave it to this committee to recommend the host country as well as the principal topics of discussion for the program of the Congress.

The third step would be the final decision of FAO at its Biennial Conference in Rome in 1957 accepting the offer of the country selected to be host to the Fifth Congress.

The fourth step, assuming that the offer of the United States is accepted, would be to begin the intensive preparations for the 1960 Congress. A World Forestry Congress is a large undertaking, and previous host countries have found it takes up to three years to complete all the necessary arrangements.



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By the Industrial Forester

(From page 20)

producing a product for which a good competitive market is ever existent. The tree farm program, co-ordinated nationally by the American Forest Products Industries, is carried out in 11 southern states. That it has been successful is evidenced by the fact that over 60% of the nation's certified tree farms are in the South, accounting for some 25,290,697 acres.

The Conservation Forester in his initial contact with the landowner, of course, advises him that adequate fire prevention is a must in the practices of good forestry on any land and points out how this can be carried out. Following this recommendation, the services provided by the Conservation Forester to landowners can be divided into three broad categories: harvesting advice and basic management recommendations, a timber marking service and pine seedlings. These are all provided without cost to the landowner.

Since the stocking of the small woodlands varies from one extreme to another, the Conservation Forester provides management assistance by recommending first, whether or not the stand would benefit from a cutting and secondly, the type of cutting needed. If the stand is in good, healthy growing condition, his recommendation will be to postpone a cut until it would benefit the stand. As professional foresters we cannot recommend a cutting when it is not needed from the silvicultural standpoint. Of course, it is also important from a future wood supply standpoint to build up the growing stock for maximum timber production. In younger stands a thinning or improvement cutting is often needed; while in the more mature stands, and in some types of understocked stands, a seed tree cutting would be the recommendation so that a new stand can be established for again building up maximum production. However, the decision on the type of cutting to be done is

entirely up to the landowner and is often dictated by extenuating financial circumstances.

When a cutting has been recommended by the Conservation Forester, the company will provide a free timber marking service to the landowner. By marking those trees to be cut with two spots of paint, one of which is at ground level, the harvesting operation recommended by the Conservation Forester can be precisely carried out. The cutters know exactly which trees are to be cut and the second spot at ground level permits the landowner to see that only marked trees were cut. Last year some 378,000 acres of private land in the South were marked by pulp and paper industry foresters. The man marking the trees does not negotiate the sale of the timber—this is entirely between the landowner and the wood dealer, nor does the company forester who marks the timber have any control over the man who cuts it.

The third basic service which the pulp and paper industry foresters provide to the small woodland owner is in the form of free pine seedlings. For a number of years now the southern pulp and paper industry has had a program of providing a certain number of pine seedlings without cost to the landowner. The theory behind these programs is that this gift of a small number of seedlings will encourage the landowner to take an interest in purchasing additional trees for planting to get his land back into timber production. We also feel that once a man plants some trees he is also sold on other phases of forestry—he doesn't want fire to destroy the seedlings, he is careful on how he has his timber cut and in general he is sold on the practice of good forestry. Some programs are carried out on a "matching basis" whereby a thousand seedlings are given for each thousand the landowner purchases up to a certain number, while in other programs the trees are an outright gift of a certain number of trees. In either case, the landowner is under no obligation to the company giving him the trees.

I hope this brief description of what the southern pulp and paper industry is doing on the ground to help improve the small woodland has given you a general idea of how these activities are carried out. Industry has great faith in the ability of these small woodlands to continue to produce successive timber crops for our country's needs. The small woodland is an indispensable part of our timber economy. They are the most accessible and most potentially productive portion of our forest resources.

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WRITE TODAY

As Viewed by the State Forester

(From page 16)

the need for protection, the time is ripe to launch a concerted program to gain acceptance of the need for management. Federal regulation of private timber cutting practices has been shelved and now it is our responsibility, at the state level, to point a better way and to meet the challenge of leadership in getting small woodlot owners practicing sound forestry.

Our efforts are bent toward improving our services to landowners, in the realization that we must soon convince this important segment of our population that good management of their timberland pays and is essential to insuring a supply of wood equal to the anticipated national drain a few years hence. It must be demonstrated that even with state and federal forests under management and with industries creating or expanding their forestry staffs for the management of their own lands, for private assistance, or for research, development, utilization, purchasing or sales, the small woodlot is still an important segment of our forest economy where good forestry practices are essential.

The states can do much along educational lines to convince both small operators and small landowners that the best dollar return from any woodlot in the long run is not obtained from its immediate liquidation. Although the printed and spoken word are invaluable tools, this educational work is best done by advice given in the woods and by example of successful forest management. As a result, it is becoming increasingly important that forested states maintain large enough staffs of competent service foresters to render the assistance needed. These men must be foresters, well trained in their profession, each familiar with his respective area, its people, its customs, its industries, and its markets. Each must be thoroughly grounded in the fundamentals of woodlot management and constantly alert to new techniques and modifying circumstances. Each must be a teacher and an ambassador, presenting well and honestly the cause of forestry and the concept of wise use.

Wherever management is practiced—be it in a business, an industry, a home, or a woodlot—the manager faces certain basic problems and deals with one or more of the following factors: supply of raw material, demand for the end product, labor, production, marketing, cost, and improvement or development.

Having convinced a landowner that timber is a crop and a renewing resource which he, as its owner, has a

moral obligation to protect and manage, a service forester sets about demonstrating the business of management. He determines his approximate inventory of selling stock and notes its condition and value. He estimates his production potential, and establishes an approximate sales goal. Then, knowing about how much of each product he wishes to sell and having some idea of its worth for various uses, he locates the most suitable market and recommends the sale.

He may recommend either building up, maintaining, or reducing the inventory, and he may suggest selling out some stock items completely, preferring to increase the inventory of other items. He will make recommendations concerning production methods, inventory maintenance, and cost control, and once the business is established, he will turn it over to the owner.

This service to Pennsylvania's small landowners has a total estimated production potential of at least 500,000,000 board feet per year, and will represent, in itself, an income of many millions of dollars to Pennsylvania's rural areas and wood-using industries.

A state forester, therefore, must view America's small woodlands as a big business for the conduct of which he has a professional responsibility. He must view them as essential elements in any state-wide program of watershed development or management, and he must consider them as basic assets in his plans for dealing with the overwhelming demands for out-of-door recreation—if for no other reason than their aesthetic value to the touring motorist. As demands and pressures become greater, no aspect of forest use can be over-looked or discounted, and it is our continuing responsibility to bring about in the hearts of the landowners an awareness of the great needs.



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By the Consulting Forester

(From page 21)

On the average about 45% of the consultants business is management of stumpage sales. Appraisals, management plans, boundary surveys and timber stand improvements accounted for the remaining 55% in that order of importance.

An interesting point is that 68% of all the above operations were on ownerships of 200 acres or less. Fifteen percent were on ownerships of 200-500 acres and only 17% were on larger ownerships. Apparently the consultant is reaching the small owner.

The above accomplishments were made along side of a vigorous and effective county forester program which in 12 years of operation has earned the respect of the forest owner, industry, and the private forester.

At the start of the program 12 years ago, the idea of marking timber for cutting or even the idea of partial cutting was new to most owners, loggers and wood using industries. At this time and for a number of years much emphasis was put on marking as the most important step in getting good cutting methods put into effect. This helped to establish the practice at a time when consulting foresters were practically non-existent in the small ownership field. As public acceptance grew and as a combination of favorable economic influences put stumpage in the class of a sellers market, private consultants started to appear. At first these were either partly subsidized by a non-profit, privately supported conservation organization or as in my case relied partly on lumber operating to make a full-time living. As the number of consultants grew, less emphasis was put on service by the county foresters and more on education and advice. After having been given advice or help, owners were encouraged to turn to consultants for complete service—especially in timber marking and sales.

It would not be correct for me to give you the impression that all consulting foresters in my state are completely satisfied with the situation. There are a few who object to any service by the public foresters and feel that they are being faced with unfair competition especially in the timber marking field.

The exact point where the public forester should draw the line at giving service is difficult to define. It is mostly a matter of individual judgment within the framework of the general policy under which he operates.

I believe it is unrealistic for some consulting foresters to demand that the

county forester desist from all service. The county forester must do more than talk to be effective. Marking timber and giving marketing assistance is one way in which he can do something tangible and prove the worth of good forestry practice to the doubting owner.

An abrupt withdrawal from marking in areas not fully serviced by private foresters would undoubtedly cause some owners to revert to uncontrolled sales.

Then there certainly are cases especially in very small acreages and timber volumes where the private consultant cannot afford to operate at his usual rates or would have to charge very high rates to make it worth his while. Some consulting foresters claim they will go anywhere for a single acre, but in practical application there is a definite limit to the amount of low-income work he can undertake even taking into consideration advertising and public relations.

On the other side there seems to be little justification for repeated marking for owners who have had previous service. This certainly encourages owners to go to the county forester just to save the cost of a consultant.

So far I have discussed primarily the business aspects of the relationship between the private and public foresters. There is much more to it than that. The private foresters have a position of great moral responsibility in rendering truly impartial professional service to their clients. They must constantly be on guard against overmarking or high grading and must be willing to advise an owner to defer cutting if that is indicated. They must be especially careful in this field since the size of their earnings in stumpage sales are favorably influenced by both the volume of timber marked and the quality of the trees.

They must constantly seek more complete and better methods of utilization not only to permit them to operate more effectively in sawtimber stands, but to permit improvement operations in low value stands—especially in hardwoods. We have a long way to go in this field and as a group, I think we tend to take more interest in high-value saw timber sales than the more difficult and less profitable management of low-value timber.

In advocating public policies which increase our business opportunities, we should not lose sight of the fact that we are assuming real responsibilities; and that we must constantly meet these if we are to justify our position of trust.

Youth Groups

(From page 25)

dents to really learn something about forestry, it must be studied on an organized, systematic basis and must involve many hours of study and practice to gain the necessary knowledge of what to do and skills with which to do.

According to the U. S. Forest Service, Georgia led the nation in both the number of trees planted and tree seedlings produced for the year—July 1, 1955, to June 30, 1956. A total of 112,833,000 seedlings were produced and planted in Georgia during this period. The entire tree seedling crop was distributed to landowners for planting. In addition, the demand for tree seedlings exceeded the supply by approximately 15 million. Planting seedlings is only one of several important steps in the forward march of forestry management and development in this state. Great progress has been made in forest fire protection and control. The teaching of forestry has certainly played a part—and in my estimation—an important part in this great program of forestry in Georgia. It helped materially to create a climate—an understanding and a desire. These are essential for progress.

May I also mention briefly the important contributions being made by other individuals and organizations in promoting the teaching of forestry as a part of vocational agriculture.

First, I would like to mention, as an example, the work that has been carried on as a result of the vision of the officials of the Seaboard Air Line Railroad Company. Twelve years ago this R. R. employed a forester to promote better forestry practices in the six states served by this great railroad company. Robert N. Hoskins was employed to carry out this work. Mr. Hoskins with the full support of this company and in cooperation with other companies and groups has done a remarkable job.

In the six states served by this railroad company and partly as a result of the efforts of the Seaboard's industrial forester, more than 80,000 boys each year study on an organized, systematic "doing basis" the subject of forestry.

A similar program is being carried out in many other states where forests are important to the economy of the states.

In recognition of the splendid job being done by the vo-ag teachers in Georgia and in order to further develop the program and to make it more effective, the Georgia Trust Company, one of the strongest and largest Banking systems

in the Southeast, last year donated to the vocational education authorities of Georgia a sum of \$50,000.00 for further development and improvement of forestry education as a regular and integral part of vocational agriculture. A story of this important undertaking was carried in the February 1956 issue of the AMERICAN FORESTS magazine.

Several of the large wood using industries, such as the Union Bag & Paper Company and the St. Regis Paper Company, are now working in close cooperation with the teachers of vocational agriculture.

I have long advocated the teaching of forestry to children in the elementary school grades. We need to reach them during their young impressionable years so they will develop the right sort of attitude toward the conservation and utilization of one of our very important renewable resources. In order for progress to be made on this front, the first step to be taken is that of training elementary teachers so they will have a knowledge of the importance of our forest resources.

In closing may I say that though great progress has been made in the teaching of forestry in the secondary school program of the nation, and to a limited extent in some elementary grades, there is still much to be done. Those of you who are members of this association can play an important role in getting sound programs of instruction in forestry adopted in the schools of your communities and states.

Yes, the future belongs to those who prepare for it. Let's make the future of forestry secure by seeing to it that the youth of the land are taught to understand its value and the importance of sound practices—and above all stimulated to put to use on their home farms the knowledge and skills they acquire.

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Small Watershed Program in Relation to Forest
Conservation

(From page 27)

search, and educational assistance.

Solution of the complex problems in small watersheds requires:

1. Soil and water conservation practices applied as needed on individual farms and ranches. Wise land use and treatment are the foundation for watershed protection and flood prevention.
2. Teamwork of local organizations, including groups of landowners, communities, towns, counties, and cities, with state and federal governments to build necessary structures and make other improvements that individuals cannot install alone. These are the group or community improvements that support conservation treatment of land in farms and ranches in the watershed.

Two kinds of flood prevention measures are eligible for federal assistance.

One type of improvement prevents the destruction of land and, therefore, reduces the movement of huge and damaging amounts of silt, sand, and stone to stream channels and lower land.

Another type of measure controls wa-

terflow and water-borne sediment that cause damage to groups of landowners, communities, and the general public.

Federal financial help is also available for water-management measures such as drainage, irrigation, and measures to provide a more uniform supply and distribution of water.

Drainage measures provide for more efficient land use on existing farms and ranches. Present drainage systems serving two or more farms may be improved. Or new drainage systems may be provided for areas used for crops or grazing. The measures include all parts of a group drainage system.

Irrigation measures include diversion dams, wells, pumping plants, sealing existing storage reservoirs, sluiceways, canal headworks, canal laterals, canal lining, and main distribution pipelines to carry water to individual farms.

Help may be given to provide a more uniform supply and distribution of water for agricultural, municipal, or industrial use if the improvements are a part of the watershed plan. These measures will be designed to make annual streamflow more stable, to increase the recharge of ground-water reservoirs, and to store water for agricultural, municipal, or industrial uses.

Some small watersheds may need none of the special measures for which the federal government provides financial assistance under the act. Some watersheds need only the soil and water conservation practices that can be applied by farmers and ranchers with technical, cost-sharing, credit, and educational assistance already available.

If a watershed needs more than that, help can be provided under authority of Public Law 566 when:

1. The watershed is smaller than 250,000 acres;
2. There is a local organization having legal authority from the state to carry out, operate, and maintain the needed works of improvement for watershed conservation and flood prevention;
3. The state approves your application for assistance;
4. The benefits of the proposed work are greater than the costs;
5. The local organization and the Department of Agriculture agree on a plan; and
6. Federal funds are available.

For federal help the watershed must contain less than 250,000 acres. Moreover, all of it must be within the bound-

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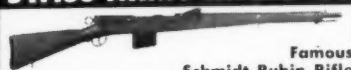
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aries of the local qualified sponsoring organization or combination of organizations. If a watershed contains more than 250,000 acres, assistance may be requested in separate applications for two or more subdivisions, each of which is a subwatershed or subwatershed area. They may be planned jointly.

Since passage of Public Law 566, many states have reviewed their laws to determine what legislation, if any, is required for state agencies and local organizations to participate in watershed development. Many states found that their local agencies or organizations did not have the needed authority, and already have passed or are preparing to pass enabling legislation.

An application for assistance must be submitted to the state agency that has responsibility for watershed work in the state. As a matter of policy, the Soil Conservation Service will not take action on an application until the state agency has approved it. By law, the service cannot act on a disapproved application.

The act provides for federal help with watershed works of improvement only after it has been "determined that the benefits exceed the costs." The policy of the Department of Agriculture requires that monetary benefits must be greater than costs for all structural measures for which the federal government shares in the cost. Benefits both within the watershed project and downstream may be evaluated.

Monetary evaluations are *not* required for benefits from soil and water conservation measures applied to the land, however. Long experience has shown that private and public benefits from land-treatment measures are greater than costs.

Each watershed has its own combination of problems. Solutions must be tailored to fit these problems. This is watershed planning. In many ways it is similar to soil and water conservation planning for individual farms and ranches where each plan is custom-made to solve that farm's problems of land use, land damage, and water management. Each plan takes into full account the owner's wishes and abilities. But any measures for which federal aid is provided must meet certain sound minimum technical standards.

A sound watershed work plan provides for the conservation, use, and development of all lands and waters within the drainage basin. It meshes with the goals, abilities, and desires of the local people. It provides for needed structures and other improvements any one member of the group cannot be expected to build. Farm and city people and their local, state, and federal governments are able

to work together as never before to solve such common watershed problems.

The watershed work plan is a *proposal* of the local organization and the U. S. Department of Agriculture. It provides for specific improvements to support and supplement both soil and water conservation measures on farms and ranches and works of improvement on major rivers.

This plan guides the local organization in its efforts to protect and develop land and water resources. It is a basis for all state and federal technical and financial help. It is a guide for budgeting and using federal funds when appropriated.

The plan gives information on:

1. The problems in the watershed.
2. The needs and desires of the local people.
3. The planned land-treatment measures and structures.
4. Estimated costs and benefits of the project.

NEW MILL FOR WEST VIRGINIA PULP AND PAPER COMPANY

A major mill expansion program at Luke, Maryland, calling for the expenditure of \$50 million over the next few years, was approved by the board of directors of West Virginia Pulp and Paper Company.

According to John A. Luke, mill manager this mill will be the largest ever undertaken by the company at one location.

Present plans call for the installation of two new large paper machines, capable of running at maximum speeds of 2500 feet per minute, one producing coated and the other uncoated papers.

5. Proposed expenditures of local, state and federal funds.
6. The time-table for completing the project.
7. Provisions for maintaining the measures and structures.

During all planning stages, Soil Conservation Service technicians work closely with representatives of sponsoring local organizations and all others concerned. Local people are called on at every stage of planning to make decisions based on the facts.

Work plans also include needed measures and improvements on federal lands within the watershed. The Soil Conservation Service arranges for the field office of each federal agency responsible for land in the watershed to assist in preparing the work plan.

Cost-sharing proposals and arrangements must be included in the watershed work plan. The Watershed Protection

and Flood Prevention Act and policies established by the Secretary of Agriculture determine which costs can be borne by the federal government, and which ones cannot. Local organizations or landowners and operators are required to bear certain costs, either in cash or the equivalent in labor, services, and materials.

The Department of Agriculture can make loans or advancements to local organizations to help them pay their share of the cost. Such loans or advancements are limited to \$5 million for one project with a repayment period up to 50 years.

The local organization or individual landowners and operators pay for the following:

1. Land, easements, and rights-of-way needed on privately-owned land for structures or other improvements. The local organization may acquire them by purchase or gift.
2. Water rights required by state laws.
3. Water capacity in structures for any purpose other than flood prevention.
4. Operating and maintaining structures and other improvements on privately-owned land. If a structure placed on federal land benefits local people, they share the maintenance cost to the extent they are benefited.
5. Administering contracts let by the sponsoring organization for improvements on privately-owned property. The federal government lets and administers contracts only on federal land.
6. Applying soil and water conservation measures on individual farms and ranches.

The federal government pays for the following:

1. Planning services, including all help given for surveys and investigations and for preparation of work plans before federal aid is authorized.
2. Additional technical assistance to landowners who plan and apply soil and water conservation measures on their own farms and ranches. Farmers and ranchers receive this assistance from the Soil Conservation Service through soil conservation districts. Additional technical assistance may be given from funds appropriated under the Watershed Protection and Flood Prevention Act *only* as required to complete land-treatment measures within the agreed-upon period for project installation.
3. Installation services, including surveys, site investigations, layout, de-

sign, preparation of specifications for structures, and supervision of construction.

4. Application of land-treatment measures on federal lands.
5. Construction costs applicable to flood prevention.

When the local organization and the Soil Conservation Service tentatively agree on a complete watershed work plan, all others with a direct interest or responsibility in the project must have an opportunity to review the plan.

The state conservationist arranges for reviews within the service and by other federal or state agencies that will help to carry out the plan. Any changes they suggest will be discussed with the local organizations. If the organization and the service agree, these changes are made in the work plan.

The completed plan then goes to the Soil Conservation Service in Washington. A copy is sent also to the governor of the state. If funds are available, work can begin at once provided (1) the work plan does not include any single structure having more than 2,500 acre-feet of capacity; and (2) the estimated federal share of the cost does not exceed \$250,000.

If the work plan includes a structure having a capacity of more than 2,500 acre-feet, or if the federal cost exceeds \$250,000, the work plan must (1) be reviewed by interested federal agencies (within a 30-day period); and (2) be approved by the Committee on Agriculture of the House and the Senate except that work plans containing a single structure having a capacity of more than 4,000 acre-feet must be approved by the Public Works Committees of the House and the Senate instead of the Committees on Agriculture.

To carry out the plan all people in the watershed must be fully informed about what is being done and why, and what each group's responsibilities are. This calls for a continuing program of information and education.

Structures and other flood-prevention measures are only partial or temporary aids unless soil and water conservation practices are applied on individual farms and ranches and on public lands of the watershed.

The law, in fact, requires that local organizations obtain agreements from landowners to carry out recommended soil conservation measures on not less than 50 percent of the land in the drainage area above each floodwater-retarding structure to be built with federal help. Departmental policy goes further. It requires that 75 percent of the recommended land-treatment measures be installed or scheduled for installation

above structures wherever their design, construction, or maintenance would otherwise be adversely affected.

Measures which must be applied on the land before federal help is given with structures are those that greatly reduce runoff and sediment or increase the usefulness of drainage and irrigation facilities. Above structures these practices include terracing, cover crops, and protected waterways. Below structures they include land leveling, tile drainage, and irrigation practices.

Farmers and ranchers receive the additional technical assistance needed to plan and apply the soil and water conservation measures included in the watershed work plan during the period of project installation.

The Soil Conservation Service aids them to develop and carry out basic plans of the same type as landowners are now making with this assistance through soil conservation districts.

The U. S. Forest Service provides the specialized technical assistance farmers and ranchers need to apply the more difficult forestry practices. This help usually is made available through the state forestry agency. The Forest Service also gives technical help with conservation measures needed on privately-owned range lands within the national forests and on range lands adjoining national forests and administered in conjunction with the forests under formal agreements with the owners or lessees.

The Soil Conservation Service helps the local organization plan, design, and supervise the building of structural measures included in the approved watershed work plan.

When a watershed work plan includes structures for municipal or industrial water supply, the local organization is required to obtain non-government professional engineers for the construction of such structures.

The local organization has the option of obtaining non-government professional engineers or using SCS engineers for construction. If the local organization obtains non-government engineers, it will be reimbursed for this service by the Department of Agriculture; and the department may advance to the local organization 5 percent of the total construction cost for this purpose.

The Forest Service installs or assists state and local agencies to install fire-protection facilities on forest and brush-covered land.

Financial assistance can become available only after the sponsoring agency has obtained necessary land, easements, and rights-of-way, and has signed a co-operative agreement providing for contracting of structures in one or more

"construction units." A group of closely related or interrelated structures that provide benefits greater than costs is a construction unit.

The local organization invites bids, awards contracts, and administers contracts for all structures on privately-owned land. As work progresses federal funds are made available to the local organization for payment to contractors.

In addition to assistance under the Watershed Protection and Flood Prevention Act, the local organization will have the aid of other federal, federal-state, and state programs dealing with land, water, plants, and trees. The Soil Conservation Service will use, and encourage other agencies to use fully the help available under other federal legislation to speed the completion of watershed projects.

The agency administering federal lands within the watershed will be responsible for installing, operating, and maintaining any soil and water conservation measures or structures necessary for flood prevention. The state is responsible for structures and other improvements that may be needed on state-owned lands within your watershed.

The local sponsoring organization is responsible for operating and maintaining structures and other works of improvement on privately-owned land. The local organization may arrange with some other agency or organization to operate and maintain these improvements. In either case, a written agreement on maintenance is required before federal funds are made available for any part of the cost of construction.

Structures and soil and water conservation measures on federal lands will be operated and maintained by the agency administering those lands.

Soil and water conservation measures on individual farms and ranches will be maintained by the owners or operators under agreements with their local soil conservation district. If the watershed is outside a soil conservation district, the local organization must make arrangements satisfactory to the Secretary of Agriculture for fulfilling this responsibility.

Watershed protection, development, and flood prevention on upstream watersheds depend first of all upon positive local interest and participation. Experience shows that the partnership approach is the most practicable way to do the job. This means that local people, acting through their soil conservation districts, watershed districts, and other similar organizations, take the leadership while local, state, and federal units of government contribute their technical, financial, educational, and other services.



HAS IT OCCURRED TO YOU?

There are many members and friends of The American Forestry Association who find it impractical to contribute to its educational activities during their lifetime. Gifts in the form of a bequest are welcomed. Officers of the Association will gladly consult at any time with those who wish to know more about designating gifts for educational work in forest conservation.

Following is a paragraph suitable for incorporation in will:

"I hereby give, devise and bequeath _____ to The American Forestry Association, Washington, D. C., a non-profit District of Columbia corporation, or its successor, or successors, for the purpose of promoting the corporate activities of said Association."

THE AMERICAN FORESTRY ASSOCIATION

919 Seventeenth Street, N.W.
Washington 6, D. C.

Tools for Tomorrow

(From page 30)

Ohio pertaining to trees, grass, shrubs, and flowers, this study was undertaken for the purpose of defining the aims of this administration in the conservation of natural resources."

I think the honors should go to Mr. Alderman and others who came to me and said "Ohio needs a study of its natural resources." I lived in a tenement area and there was not a flower, tree or blade of grass in my life from my birth until I grew to manhood. My mother lived in that tenement house, and it is one of the regrets I have that I did not take her out of that environment.

My interest in developing natural resources in Ohio came when I was a young man. A group of us went to southern Ohio, playing baseball. I looked at the hillsides and couldn't understand what had happened to them. Horrible scars were on those hills; rock and shale were exposed. I learned that it had come from strip mining—taking coal out of the earth. About 20 years later I went back as a candidate for governor, and conditions were worse. While many supported sound school systems, good roads and many other aspects related to state government, there was one phase of it to which I wanted to give particular attention.

I had the good fortune to be with Louis Bromfield who, in my opinion, was a great leader of conservation. Out of this background has come to me this award. None will leave me with as much pride and joy as the progress which we have made in covering the barren land with trees and grasses, flowers and shrubs. We built a 241-mile turnpike. Every bit of vegetation was taken out. The highway was needed and serves a great purpose, but it is a symbol of what is happening to our land in connection with expansion.

My hope is that with the Ohio Forestry Association, The American Forestry Association and the type of men and women assembled here we shall not become unmindful of our obligation to posterity. I am grateful for the honor you have given me. One tribute to you men and women, unsung but giving of yourselves daily to a great cause; you are helping your states and our country beyond my ability to describe. Unless we are careful, the good earth is going to become denuded, and our contribution to posterity will become a travesty.

Carry on the good work. The measure of the work you are doing will be known eventually.



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3. Drown your campfire, then stir and drown again.
4. Ask about the law before burning grass, brush, fence rows or trash.

FOREST FORUM

(Continued from page 3)

in opposition to wilderness areas, and particularly the stand against the move to give greater stability to our wilderness concept, concerns me greatly. The wilderness idea began among foresters and those associated with our forests, and has been nurtured among many foresters. It seems to me that this idea is not one to be taken lightly, to be tolerated kindly as long as it does not interfere too much with other immediate commercial concerns. Senator Humphrey, Congressman Saylor, and others in our Congress have sensed a real social trend that has been gaining favor among our people in recent years, and I could give you striking incidents to show that this is strong in some other nations.

In his letter to you, published in the September issue of *American Forests*, Mr. Peter E. Terzick, of the United Brotherhood of Carpenters and Joiners of America, states the matter very well indeed. Also I have just read a statement "Technology versus Ethics" by Ernest Swift, in the *Conservation News* of the National Wildlife Federation. Mr. Swift ably discusses the use of some of our paper pulp, for example, and points out that the commercial users of our forests have a civic responsibility together with the privilege of using our resources.

Mr. Craig, we are dealing here with a social problem. Mankind is slowly, ever so slowly, reaching out for deeper perception, finer sensibilities. People are beginning to love this earth in its natural manifestations. They are more than ever enjoying the significance of what they find in their natural environment. Are we to deplore this wholesome trend? Are we going to help, as citizens, whatever our material concerns, to foster a civilization that gives due weight to esthetic trends, to quality in living?

The desire for natural forests has appeared in several groups. Labor organizations have demonstrated a keen interest, and I could cite notable examples. Furthermore, I know of a number of lumber operators who look beyond their board feet, to the social value of wilderness areas, to needs in the future. There is also a "Society for the Social Responsibility of Scientists," in a somewhat different field.

What is the great hurry to use up our resources? Consider the great waste today, in all aspects of our economic life. As one editor pointed out, our natural resources are going into our dump grounds. Probably never in history has there been greater waste of finished products than we have today in America.

Whatever our occupations, we are citizens of a country, with an ethical responsibility for taking part in our effort to build a civilization based on quality, and significant lives. We are not asking to destroy something. Our forests will still be there in the wilderness areas, for any real need in the future. All that the congressmen are asking, by their bills, is that we give national recognition to this growing desire for wilderness, and to give these areas so designated congressional assurance. Certainly, if we are lovers of our American forests, we should welcome this wholesome interest of so many people.

We have the future to consider.

Olaus J. Murie, President
The Wilderness Society

EDITOR:

I want to protest as vigorously as I am able, against the action of the Executive Committee of this association and the expressions in the editorial entitled "The Big Freeze" in the August number of *American Forests*, in opposing Senate Bill 4013, introduced by Senator Humphrey and sponsored by so many conservation organizations. I yield to no one in my belief in the multiple use principle, as applied generally to national forests. But no conservationist would ever advocate its applications to national parks, and I see no reason why it should not yield to more rigid control in these other areas affected by Senate Bill 4013.

Conservation organizations are constantly plagued by having to organize expensive campaigns to head off raids on areas where highest use calls for total conservation or something akin to it, and I see no hope of putting an end to this perpetual series of threats and invasions without some such protection as is now proposed.

I hope that the association of which I have been proud to be a member may cease to be counted in this matter on the wrong side.

Charles C. Haines
Judge (Retired) Superior Court
2470 E. Street
San Diego 2, Calif.

EDITOR:

I agree 100% with the letter of Peter E. Terzick on Wilderness Preservation quoted on the editorial page of the September issue of *AMERICAN FORESTS*.

The basic theory of multiple use of natural resources is sound when it results in the greatest benefit to the whole country in the long run. The greatest benefit cannot be measured by the number of simultaneous uses, nor by the estimates of present values in dollars. The value of the inspiration and pleasure derived from national parks and wilderness areas cannot be measured in dollars. The importance of these values will grow with the increased awareness of them and with the increase in our population. For evidence compare the record of attendance in the national parks last year to a few years ago.

Local interest may profit by subsidized irrigation or by subsidized power, but the interest of the country as a whole is best served by the production of food where it can be grown most cheaply. We must also beware of the custom in multiple use developments of allocating an excessive proportion of the total cost to flood control. Treating irrigation and power as by-products of flood control conceals the fact that the actual cost of these products is greater than their value. The total over-all cost of many multiple use projects is often far greater than the estimates on which congressional approval is based. The most effective flood control is often secured by a lot of small dams, which also tend to control erosion, rather than by the huge dams beloved by the Army Engineers and the Bureau of Reclamation.

Let us add to our national parks and protect our wilderness areas as long as possible. They can never be replaced. A few

years hence the development of atomic power and the discovery of new chemical growth stimulants for plants may postpone indefinitely the need to encroach on the areas which help to make life worth living. Man does not live by bread alone.

Charles H. Porter
Tamworth, New Hampshire

(Editor's Note—Again we ask, "Why is this bill necessary?" Why impose another layer of management on a program that is already being managed well? Turning to the national parks and monuments it would seem to us that parks and wilderness enthusiasts are jeopardizing a tested policy that has withstood every onslaught and can scarcely be improved upon. Proponents of this bill should bear in mind that how this bill starts out and how it ends up might prove to be quite a shock. Amendments and changes on the Hill might wind up by weakening the very structures of both the Forest and Parks Services. Why tinker with tested policies administered by high calibre career men? In his Bill, Sen. Humphrey proposes that the Secretary of the Smithsonian Institution serve as the Secretary of the proposed National Wilderness Preservation System. Unquestionably the Smithsonian Secretary is outstanding in his field, but what has been his past experience in the preservation of wilderness systems or the management of national forest lands?)

As members will realize, The American Forestry Association is placing big question marks before the proposals in the Wilderness Bill. We firmly believe that conservationists should very carefully examine all the proposals in this measure. In an effort to bring out all the angles, we will continue to give space to expressions of opinion on this bill, both pro and con. Meanwhile, we urge that all members read S. 4013 and study it most carefully. Most of us in this business are enthusiastic people. We have to be. But we should be most cautious in not permitting our enthusiasm to run away with our good sense.)

EDITOR:

Your editorial "Let's Fill Up the Forestry Schools" led me to re-read my copy of the 1956 Ames Forester, and to do a lot of thinking.

There must be quite a few men like myself who left the active practice of forestry because there was no particular need for our talent at the time. In my case it was sales, and in 1946 there was no need for adding salesmen when orders came in without calls.

As a manufacturers representative in fishing tackle, I have kept a close watch on developments in conservation and forest management, particularly where watersheds and recreation were primary.

Still and all that makes little use of a background including woods operations, sawmill and papermill supervision, forest reclamation surveying, nursery work plus a B.S. in forestry and economics.

If you can show a boy freedom for growth within forestry, it will not be a hard selling job; but to do so there must be a consistent demand for any of the several talents that may develop in college.

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The place: Brewton, District 11 Headquarters of Alabama's Department of Conservation, Forestry Division. The fire: surface and underground in a swampy area covering some 65 acres of virgin timber. The date: October, 1954.

4:36 P.M. the 22nd: Fire reported. Because of adverse conditions, men were unable to pinpoint the blaze in the swamp that night.

8:56 A.M. the 23rd: Crews were on the fire, fighting it with a light tractor and hand tools.

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